

thigh ;—the whole work of raising the body is thrown disadvantageously upon the long muscles of the back of the thigh. The possibility of raising the body on the legs is rather permitted by circumstances generally favourable than brought about by direct means. It is in the comparative shortness and lightness of the head and anterior part of the trunk : the length without undue weakness of the hind limb : above all, as it appears to me, in the imperfect isolation of the several muscles which enables them to act in certain directions with combined strength that we must find an explanation of the power possessed by this lizard of simulating the gait of a cursorial bird ; certain it is that in its muscular system it has no feature relating it to anything higher than its fellow reptiles.

DESCRIPTIONS OF AUSTRALIAN MICRO-LEPIDOPTERA.

By E. MEYRICK, B.A.

IX. OECOPHORIDAE—(*Continued.*)

The following additional species of *Eulechria* (besides others) were obtained since my last paper left my hands, and are therefore not included in the analytical table of that genus ; but as they are closely related to the concluding species, they may be added here without disturbing the systematic arrangement. The first alone is of somewhat doubtful affinity ; the second belongs to the group of *Eul. scopariella* ; the remaining four form a single peculiar group, with the forewings more elongate and generally narrower than in any others. except *Eul. perditæ*.

108. *Eul. leucophanes*, n. sp.

Media, alis ant. niveis, nitidis, margine costali basin versus angustissime fusco ; post. dilute albido-fuscis ; thorace griseo.

♂ 17-20 mm., ♀ 24 mm. Head white, faintly ochreous-tinged, face fuscous. Palpi long, in ♀ very long, fuscous, internally and at apex of second joint whitish. Antennae fuscous, towards base whitish. Thorax pale whitish-fuscous. Abdomen ochreous whitish. Legs dark fuscous ; posterior tibiæ ochreous-whitish,

tarsi somewhat suffused with whitish. Forewings elongate, rather narrow, costa gently arched, in ♀ more strongly, apex pointed, hind margin extremely oblique, slightly rounded: snow-white, shining; extreme costal edge very narrowly dark fuscous, sometimes towards base only; cilia ochreous-white. Hindwings very pale whitish-fuscous, towards apex rather darker; cilia ochreous-whitish.

Very distinct from any other species of the genus, but apparently most allied to the group of *Eul. scopariella* according to the long palpi, and the form of the wings.

Port Lincoln, South Australia, in November; tolerably common locally on sandhills.

109. *Eul. aërodes*, n. sp.

Media, alis ant. griseis, margine costali angustissime albido, punctis disci tribus serieque postica transversa angulata saturate fuscis; post. griseis.

♂ ♀. 21-22 mm. Head, thorax, abdomen, and legs fuscous-grey. Palpi long, dark fuscous, second joint with basal half and extreme apex whitish. Antennæ dark fuscous. Forewings elongate, costa moderately arched, apex round-pointed, hind margin extremely obliquely rounded; light fuscous-grey, finely sprinkled with darker; extreme costal edge narrowly ochreous-whitish except at extremities; a dark fuscous dot in disc before middle, a second beyond middle, and a third on fold rather beyond first; a row of dark fuscous dots from costa about $\frac{2}{3}$ to close before apex, thence sharply bent and continued very near hind margin to anal angle; two or three dark fuscous marginal dots round apex; cilia light fuscous-grey. Hindwings fuscous-grey; cilia grey, with a faint darker line.

Closely allied to *Eul. siccella*, but with the ground colour darker, without coarse blackish irroration, the costal edge sharply whitish, and the hindwings darker; it also resembles somewhat *Eul. paurogramma*, but is immediately separated by the grey head.

Deloraine and Evandale, Tasmania, in November; four specimens.

110. *Eul. tanyscia*, n. sp.

Media, alis ant. saturate fuscis, ♂ disco cano-suffuso, punctis disci quatuor lineaque postica curva nigricantibus; post. saturate fuscis, ♂ subtus flavidis.

♂ ♀. 16-25 mm Head, thorax, and abdomen dark fuscous-grey, slightly mixed with whitish. Palpi rather short, dark fuscous, second joint white towards the base. Antennæ dark fuscous. Legs dark fuscous, apex of tarsal joints white, middle tibiæ with central and apical ochreous-whitish rings, hairs of posterior tibiæ whitish-ochreous. Forewings elongate, costa in ♂ hardly arched, in ♀ moderately, apex rounded, hind margin very obliquely rounded; dark fuscous, in ♀ coarsely irrorated with whitish-grey, in ♂ irrorated with white and more or less conspicuously suffused with white towards disc; a blackish crescentic dot in disc before middle, a small round dot above middle, a crescentic mark beyond middle, and a small spot on fold hardly beyond first dot; a strongly curved dark fuscous transverse line from a cloudy darker spot on costa $\frac{3}{4}$ to anal angle, where is sometimes another darker spot; cilia with basal half barred alternately with dark fuscous and whitish, terminal half grey. Hindwings dark fuscous, under surface in ♂ dull light yellowish-ochreous, in ♀ dark fuscous; cilia fuscous-grey, with a darker line near base.

The sexes are at first sight very dissimilar; the ♂ resembles in colouring the group of *Eul. adoxella*, but is immediately separated by the nearly strait costa, and the yellowish under surface of the hindwings; the ♀ is more like *Eul. siccella*, but is easily recognisable by the uniform dark colouring.

Both sexes taken plentifully at Mount Gambier, South Australia, at rest on the trunks of *Eucalyptus Gunnii* in November; also met with at Adelaide in October.

111. *Eul. ombrophora*, n. sp.

Minor, alis ant. elongatis, albidis, leviter griseo-irroratis, vitta costali grisea, punctis disci quinque (postremo transverso) lineaque postica curva saepius obsoleta saturate fuscis; post. griseis.

♂ ♀. 10-15 mm. Head and thorax white, mixed with grey. Palpi short, second joint dark fuscous, terminal joint whitish, more or less mixed with dark fuscous. Antennæ grey. Abdomen pale grey, anal tuft of ♂ pale whitish-ochreous. Legs dark fuscous-grey, tarsal joints with obscure ochreous-whitish apical rings; hairs of posterior tibiæ ochreous-whitish. Forewings elongate, narrow, costa in ♂ almost straight, in ♀ gently arched, apex rounded, hindmargin extremely obliquely rounded; whitish, thinly and irregularly irrorated with fuscous-grey; an irregular fuscous-grey streak along costa; a dark fuscous sometimes double dot in disc before middle, two others longitudinally placed above middle, a transverse mark beyond middle, and an elongate dot on fold somewhat beyond first; these are generally rather ill-defined; a strongly curved transverse posterior grey line from an inwardly oblique spot on costa at $\frac{4}{5}$ to anal angle, often almost obsolete; cilia whitish, irrorated with dark fuscous towards base. Hindwings grey, rather paler towards base; cilia pale whitish-grey, with a faint darker line near base.

This and the next species are very closely allied, but I think distinct; *E. ombrophora* is considerably smaller, the discal dots larger and differently placed, the first dot being lower in the disc, two dots above the middle instead of one, the transverse mark beyond middle not divided into two dots, the posterior line more defined, and the terminal joint of palpi more or less whitish externally.

Quorn, South Australia, in October; rather common.

112. *Eul. sciophanes*, n. sp.

Media, alis ant. elongatis, albidis, leviter griseo-irroratis, vitta costali grisea, punctis disci quatuor, (postremo duplici) saepe obsoletis nigris; post, dilute griseis.

♂ ♀. 17-21 mm. Head and thorax white, slightly mixed with grey. Palpi short, dark fuscous, internally whitish. Antennæ light grey. Abdomen long, pale whitish-ochreous. Legs dark fuscous, apex of tarsal joints obscurely ochreous-whitish, hairs of posterior tibiæ very pale whitish-ochreous. Forewings very

elongate, narrow, costa in ♂ hardly arched, in ♀ more distinctly, apex rounded, hindmargin extremely obliquely rounded; whitish, very finely and scantily sprinkled with fuscous-grey; a fuscous-grey streak along costa; a minute black dot beneath this before middle, a second in middle, two transversely placed in disc beyond middle, and a short fine longitudinal mark on fold beneath first dot, all sometimes obsolete; sometimes indications of a dentate strongly-curved transverse grey line near hind margin; cilia whitish, sprinkled with fuscous-grey towards base. Hind wings light fuscous-grey; cilia fuscous-whitish.

The points of distinction from *Eul. ombrophora* are given above.

Quorn, South Australia, in October; tolerably common.

113. *Eul. aceraea*, n. sp.

Media, alis ant. elongatis, canis; post, griseis, ciliis albido-ochreis.

♂. 16-19 mm. Head and thorax clear white, face slightly mixed with grey. Palpi rather short, dark fuscous, internally and at base and apex of second joint white. Antennæ dark fuscous. Abdomen long, pale whitish-ochreous tinged with grey. Legs dark fuscous, posterior pair pale whitish-ochreous above. Forewings elongate, narrow, costa slightly or hardly arched, apex pointed, hind margin excessively oblique; clear white; cilia white. Hindwings grey, paler towards base, under surface whitish-ochreous; cilia pale whitish-ochreous, more ochreous towards base.

Nearly related to the preceding, but very distinct.

Petersburg, South Australia, in October; three specimens amongst thin barren scrub.

16. *ATOMOTRICA* Meyr.

Antennæ in ♂ moderate, with fine long ciliations (5), six at apex of each joint, basal joint with strong pecten. Palpi rather long, second joint exceeding base of antennæ, densely scaled, somewhat rough beneath, terminal joint shorter than second, slender, recurved. Thorax smooth. Forewings elongate, surface with tufts of raised scales. Hindwings as broad as forewings, elongate-ovate,

hind margin rounded, cilia $\frac{3}{5}$. Wings of ♀ abbreviated, incapable of flight. Forewings with vein 7 to apex, 2 from hardly before angle. Hindwings normal.

The characters of this and other genera peculiar to New Zealand are given more fully in a paper in the Transactions of the New Zealand Institute for this year; all the New Zealand species are also there described. This and the following genus are closely allied, but their exact origin is uncertain; their relationship with *Eulechria* is however obvious. The semi-apterous ♀ is remarkable; not improbably a similar character may recur in *Brachysara*, of which that sex is still unknown.

114. *Atom. ommatias*, Meyr.

Media, alis ant. fuscis. saturatori nebulois, signis disci tribus arcuatis lineaque postica transversa obscuris saturatoribus; post. albido-griseis.

Christchurch, New Zealand, in August and September; rather common.

17. BRACHYSARA Meyr.

Antennæ in ♂ moderate, with fine long ciliations (5), eight at apex of each joint, basal joint with strong pecten. Palpi short, second joint not nearly reaching base of antennæ, with short loose rough hairs beneath, somewhat projecting anteriorly, terminal joint short, slender, curved. Thorax smooth. Forewings elongate. Hindwings as broad as forewings, elongate-ovate, hind margin very faintly sinuate, cilia 1. Forewings with vein 7 to apex, 2 from hardly before angle. Hindwings normal.

115. *Brach. sordida*. Butl.

(*Oecophora sordida*, Butl., Proc. Zool. Soc. Lond., 1877, 405.)

Media, alis ant. angustis, dilute fuscis, vitta media nigricante interdum obsoleta, signis disci duobus arcuatis lineaque postica transversa obscuris saturatoribus; post. albidis.

Near Christchurch, New Zealand; formerly taken abundantly

18. LEISTARCHA Meyr.

Head with appressed hairs, sidetufts rather short, appressed. Antennæ in ♂ moderate, strongly ciliated ($1\frac{1}{2}$), basal joint moderate,

without pecten. Palpi long, second joint exceeding base of antennæ, evenly thickened with dense appressed scales, terminal joint as long as second, moderately stout, strongly recurved. Thorax smooth. Forewings elongate, apex acute, hindmargin sinuate, very oblique. Hindwings as broad as forewings, elongate-ovate, hindmargin very faintly sinuate, cilia $\frac{1}{2}$. Abdomen stout, very strongly margined. Middle tibiæ thickened with rough hairs; posterior tibiæ clothed with dense rough hairs, posterior tarsi with basal joint excessively elongate, rather stout. Forewings with vein 7 to hindmargin, 2 from hardly before angle. Hindwings normal.

I am now satisfied that this genus is wrongly placed in this neighbourhood, and should be transferred to a position between *Eochroa* and *Zonopetala*. It is closely allied to *Eochroa* in most respects, but in the absence of the basal pecten of the antennæ it approaches *Zonopetala* and the succeeding genera. The persistence of the rosy tinge in the cilia, especially beneath, is an interesting indication of affinity. The singularly elongated basal joint of the posterior tarsi is unique, and I have had no opportunity of observing its object. The habits of the larva are known, and are also peculiar.

116. *Leist. iobola*, n. sp.

Magna, alis ant. fuscis, creberrime albido-conspersis, venis albidis, vittis duabus anticis, tertia postica, quarta dorsi saturate fuscis; post. griseis; ciliis omnibus leviter roseo-suffusis.

♂. 31 mm. Head fuscous-grey, on sides ochreous-whitish. Palpi whitish, somewhat mixed with dark fuscous, with basal half of second joint externally dark fuscous. Antennæ whitish. Thorax fuscous-grey. Abdomen grey, anal tuft ochreous-tinged. Anterior and middle legs dark fuscous, beneath white; posterior legs whitish, tarsi mixed with ochreous-grey. Forewings elongate, costa moderately arched, apex acute, hindmargin markedly sinuate, rather strongly oblique; dark fuscous, very closely strewn with very elongate whitish scales; all veins and extreme costal margin slenderly whitish; a clear dark fuscous streak above cell from base to before middle, thence obscurely continued between veins

to costa before apex ; a dark fuscous-streak beneath cell almost from base to middle ; a sharply defined dark fuscous streak from middle of disc to hindmargin beneath apex ; a slender dark fuscous streak along inner margin from near base to middle of hindmargin, broader on anal angle and attenuated thence, sharply interrupted by veins ; cilia fuscous, becoming white towards tips, suffused with light rosy, especially above apex ; on undersurface rosy tinge much stronger. Hindwings fuscous-grey, rather lighter towards base ; cilia grey, towards apex with tips whitish and base pale rosy.

This fine species is coloured in admirable imitation of the fibrous bark of the *Eucalyptus* on which it lives.

Larva 16-legged, very elongate, cylindrical, slightly tapering towards both ends ; whitish-grey, segmental divisions ochreous-tinged ; dorsal very slender, greyish-fuscous, anteriorly lighter and more greenish ; subdorsal rather broad, rather dark greyish-fuscous ; spiracular slender, irregular, greyish-fuscous ; spiracles grey-whitish, enclosed in a fuscous ring ; spots minute, black ; head very pale reddish-ochreous ; irregularly marked with dark reddish-fuscous spots ; second segment whitish-grey, thinly speckled with dark fuscous ; anal segment speckled with dark fuscous, with subdorsal lines indicated. Feeds on *Eucalyptus amygdalina* (*Myrtaceæ*), concealing itself beneath loose bark, to which it attaches with silk the leaves on which it is feeding.

I found a single larva near Picton, New South Wales, at about 1000 feet, in September, and bred the imago in December.

19. OENOCHROA Meyr.

Head with appressed hairs, sidetufts rather small, appressed. Antennæ in ♂ moderate, moderately and evenly ciliated (1), basal joint stout, with strong pecten. Palpi moderately long, second joint exceeding base of antennæ, with appressed scales, strongly dilated beneath towards apex with somewhat rough laterally compressed scales, terminal joint rather shorter than second, slender, recurved. Thorax with a small posterior crest of scales. Forewings elongate, moderate, apex pointed, hindmargin very oblique, slightly rounded. Hindwings rather narrower than forewings,

elongate-ovate, hindmargin slightly rounded, cilia $\frac{2}{3}$. Abdomen moderate, strongly margined. Posterior tibiæ clothed with very long dense hairs above. Forewings with vein 7 to apex, 2 from somewhat before angle of cell. Hindwings normal.

Probably a direct development from *Eulechria*, from which it differs by the thoracic crest, and dilation of apex of second joint of the palpi; the ♀ of *Oen. iobaphes* closely approaches the group of *Eul. adoxella*.

I have three species, thus distinguished:—

- 1a. Forewings with a cloudy pale anterior fascia....118. *endochlora*
- 1b. ,, without pale fascia.
- 2a. Hindwings clear yellow.....117. *lactella*
- 2b. ,, more or less suffused with fuscous...119. *iobaphes*

117. *Oen. lactella*, Walk.

(*Gelechia lactella*, Walk., Brit. Mus. Cat., 648.)

Media, alis ant. saturatius griseis, macula plicæ ante medium punctisque disci quatuor nigris, macula anguli analis lineisque duabus posticis transversis obsoletis saturationibus; post. ochreo-flavis, apice ciliisque griseis.

♂ ♀. 20-23 mm. Head, palpi, antennæ, and thorax dark grey, base of palpi whitish. Abdomen ochreous-yellow. Anterior and middle legs dark grey; posterior legs whitish-yellow. tarsal joints greyish towards base. Forewings elongate, costa moderately arched, apex round-pointed, hindmargin very oblique, slightly rounded; rather dark slaty-grey, finely and irregularly irrorated with bluish-whitish points; a very ill-defined small roundish blackish blotch on fold at $\frac{1}{3}$; a faint dark fuscous spot on costa at $\frac{1}{3}$; a blackish dot in disc before middle, two others transversely placed and nearly confluent beyond middle, and a fourth below middle; an irregular ill-defined blackish-grey blotch on anal angle; a very indistinct blackish-grey line from costa at $\frac{2}{3}$ obliquely outwards, sharply bent in disc and terminating in anal blotch, and another similar line intermediate between this and hindmargin, both sometimes obsolete; cilia grey. Hindwings clear ochreous-yellow, extreme apex dark fuscous-grey; cilia fuscous-grey.

Characterised by the clear yellow hindwings, and blackish spot on fold.

Mr. G. H. Raynor once bred this species from an undescribed larva feeding between joined leaves of a species of *Eucalyptus*.

Brisbane and Sydney, in September and March ; not common.

I suspect Walker may have intended to call this species *latella*.

118. *Oen. endochlora*, n. sp.

Minor, alis ant. saturate griseis, fascia antica curva discoque exalbido-suffusis, punctis disci quinque, macula anguli analis, lineisque duabus posticis transversis obsoletis saturate griseis ; post. albido-flavis griseisve, apice ciliisque griseis.

♂ ♀. 14-16 mm. Head dark grey, margins ochreous whitish. Palpi dark grey, somewhat mixed with ochreous-whitish. Antennæ dark fuscous. Thorax dark fuscous, slightly mixed with ochreous-whitish. Abdomen whitish-ochreous or light yellowish-ochreous. Legs dark fuscous, apex of middle tibiæ and tarsal joints obscurely whitish-ochreous, posterior legs pale yellowish-ochreous above. Forewings elongate, costa moderately arched, apex round-pointed, hind margin very oblique, slightly rounded ; dark fuscous-grey or blackish-grey, more or less irrorated with very pale yellowish-grey or whitish-scales ; these generally coalesce to form a rather broad strongly outwards-curved transverse fascia from $\frac{1}{4}$ of costa to $\frac{1}{4}$ of inner margin, and often a more or less defined discal suffusion, sometimes extending to hindmargin ; on this the ground colour appears to form two dots before middle, two beyond middle, a fifth below middle, a spot on anal angle, and two posterior sinuate transverse lines ; cilia dark fuscous, becoming whitish-fuscous towards tips. Hindwings varying from whitish-yellow to grey, base lighter, apex dark grey ; cilia grey, sometimes yellowish-tinged.

Distinguished by its small size, and the curved anterior fascia. The variability of colour in the hindwings is a remarkable feature, and is entirely irrespective of sex, but seems to be influenced by locality ; Quorn specimens have them usually more yellow than those taken at Wirrabara, which are mostly grey.

Mr. F. G. O. Tepper has bred this species from galls on *Eucalyptus oleosa*.

Quorn, Wirrabara, and Androssan, South Australia, in October ; common.

119. *Oen. iobaphes*, n. sp.

Media, alis ant. ♂ saturate griseis, macula costa elongata media albido-conspersa, ♀ griseis, albido-sparsis, serie punctorum quinque antica, tribus disci posticis lineaque transversa nigrantibus ; post. fuscis, ♂ basim versus ochreo suffusis.

19-21 mm. ♂. Head, palpi, antennæ, and thorax dark grey, somewhat sprinkled with bluish-whitish, face suffused with whitish. Abdomen light yellowish-ochreous, somewhat greyish-tinged. Anterior and middle legs dark fuscous ; posterior legs whitish-ochreous. Forewings elongate, costa gently arched, apex round-pointed, hindmargin straight, extremely oblique ; dark fuscous-grey, with two or three scattered bluish-whitish scales posteriorly ; an elongate semi-oval costal blotch of thickly-strewn bluish-whitish scales, extending along costa from $\frac{1}{4}$ to $\frac{3}{4}$; a faint blackish spot on fold at $\frac{1}{4}$: cilia fuscous-grey, towards tips paler and ochreous-tinged. Hindwings smoky-ochreous, posteriorly somewhat suffused with fuscous, apex dark fuscous-grey ; cilia grey, base ochreous.

♀. Forewings rather more elongate ; grey, irrorated throughout with whitish ; extreme costal edge white ; a few scattered blackish scales near base ; five black dots forming a slightly inwards-curved row from beneath $\frac{2}{5}$ of costa to above $\frac{2}{5}$ of inner margin ; a black dot below middle of disc, and two others transversely placed beyond middle ; a minute whitish spot on costa in middle, and another at $\frac{3}{4}$, each followed by a few blackish scales ; from apex of second proceeds a strongly outwards-curved blackish line to inner margin before anal angle : cilia grey, irrorated with whitish. Hindwings fuscous-grey, base somewhat ochreous-tinged ; cilia grey, extreme base ochreous.

The sexes are at first sight very dissimilar, owing to the dark suffusion of the ♂.

Sydney and Murrurundi, New South Wales, in November ; three specimens (1 ♂, 2 ♀).

20. MACHETIS Meyr.

Head densely scaled, sidetufts large, meeting, projecting somewhat over face. Antennæ in ♂ rather stout, somewhat serrate, with short uneven cilia ($\frac{1}{2}$), basal joint rather stout, in ♀ more elongate, without pecten. Palpi long, second joint exceeding base of antennæ, strongly thickened with dense appressed scales, slightly loose beneath ; terminal joint shorter than second, strongly reflexed, slender. Thorax with dense erect crest. Forewings elongate, moderate, apex obtuse, hindmargin obliquely rounded. Hindwings hardly narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{4}$. Abdomen rather stout, strongly margined. Posterior tibæ clothed with very long hairs. Forewings with vein 7 below apex, 2 from before angle of cell. Hindwings normal.

Apparently most allied to *Oenochroa*, and probably a development of it, but this is by no means certain ; it differs from all the neighbouring genera by the termination of vein 7 in the hindmargin ; in the short ciliation of the antennæ, and absence of the basal pecten, it resembles *Sphyrrelata*.

120. *Mach. aphrobola*, n. sp.

Media, alis ant. saturate ochreo-fuscis, maculis costæ duabus magnis, dorsi duabus anticis conjunctus, strigulaque anguli analis niveis ; post. dilutissime flavidis, apicem versus griseis.

♂ ♀. $15\frac{1}{2}$ -19. mm. Head snow-white. Palpi white, densely irrorated with dark fuscous except on outer side of terminal joint, and apex of second joint. Antennæ whitish, suffusedly annulated with dark fuscous. Thorax dark fuscous, with a white posterior spot. Abdomen whitish-ochreous. Anterior and middle legs dark fuscous, tarsal joints with whitish apical rings ; posterior legs whitish-ochreous. Forewings moderate, costa gently arched, apex round-pointed, hindmargin obliquely rounded ; dark ochreous-fuscous, lighter in middle of disc ; a large rounded-triangular

white costal blotch, extending on costa from near base to middle, its apex reaching more than half across wing, along costa mixed with dark fuscous ; a semi-oval white blotch on inner margin about basal third, and a smaller irregularly-triangular posteriorly ill-defined white spot on the middle of inner margin, confluent on margin ; sometimes three or four irregularly-placed very small dark fuscous spots on disc, partially surrounded with white scales ; an irregular somewhat pentagonal white blotch on costa at $\frac{3}{4}$, its apex produced as an irregular ill-defined white streak to anal angle ; a very small ill-defined white apical spot ; cilia dark fuscous, with two white transverse bars towards apex, a larger white spot at anal angle, and three ill-defined whitish bars between these. Hindwings very pale whitish-yellow, towards apex suffused with grey ; cilia very pale whitish-yellow, with an indistinct grey line round apex.

A very distinct and conspicuous species.

Sydney and Hobart, from October to December ; rather common, usually at rest on fences.

21. *PLACOCOSMA* Meyr.

Head smooth, sidetufts large, spreading, meeting behind. Antennæ in ♂ moderate, somewhat serrate, rather strongly ciliated ($1\frac{1}{2}$), basal joint rather stout, with strong pecten. Palpi moderate, second joint not reaching base of antennæ, somewhat dilated with dense appressed scales, distinctly rough beneath, terminal joint as long as second, moderate, recurved. Thorax with a dense posterior crest. Forewings elongate, moderate, apex obtusely pointed, hindmargin almost straight or slightly concave. Hindwings hardly narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{4}$. Abdomen moderate. Posterior tibiæ clothed with long dense hairs above. Forewings with vein 7 to apex, 2 from somewhat before angle. Hindwings normal.

Structurally this genus very closely approaches *Oenochroa*, differing in little but the absence of the rough dilation towards the apex of the second joint of the palpi ; they are perhaps collateral developments. Superficially there is little resemblance between them, the species of *Placocosma* being handsomely marked with large white blotches.

- 1a. Thorax dark fuscous.....121. *hephaestea*.
 1b. „ orange-ochreous.. 122. *anthopetala*.

121. *Plac. hephaestea*, n. sp.

Minor, alis ant. saturate fuscis, macula dorsi antica permagna, altera costæ media parva, strigaeque ante-apicali curva dilutissime flavidis, niveo-marginatis, macula dorsi postica dilute rufa; post. aurantiacis, postice leviter fusco-tinctis.

♂ ♀. 14-15½ mm. Head white, margin of eyes dark fuscous, crown faintly yellowish-tinged. Palpi white, basal half of second joint externally dark fuscous. Antennæ dark fuscous. Thorax dark fuscous, with small white posterior spot. Abdomen orange-ochreous, somewhat suffused above with fuscous. Anterior and middle legs dark fuscous, apex of joints whitish-ochreous; posterior legs ochreous, tarsal joints greyish towards base. Forewings moderate, costa gently arched, apex round, pointed, hindmargin slightly sinuate, oblique; dark fuscous; a large yellowish-white blotch, margined with pure white, extending on inner margin almost from base to middle, its posterior edge slightly convex, its upper edge very near and parallel to costa; a rather small semi-circular white spot, posteriorly yellowish-tinged, on costa slightly beyond middle; an ill-defined pale reddish-fuscous blotch towards anal angle, posteriorly mixed with darker fuscous, and containing two small spots of pale yellowish scales; an ill-defined inwards-curved slender white, posteriorly pale yellowish, streak from costa at $\frac{5}{8}$ to hind margin below middle; cilia dark fuscous, suffused with blackish, with a large pale yellowish spot on middle of hindmargin, towards base pure white, rather narrower, and bisected by a short dark fuscous line, cilia towards anal angle mixed with reddish-fuscous. Hindwings ochreous-orange, slightly fuscous-tinged towards apex; cilia fuscous grey.

A very distinct and handsome insect.

Sydney, in November and December; four specimens in gardens.

122. *Plac. anthopetala*, n. sp.

Minor, alis ant. saturate fuscis, fascia antica lata recta, maculæ costæ media, altera apicis, tertia anguli analis riveis; post. griseis.

♂ 14 mm., ♀ 19 mm. Head orange-ochreous, face paler. Palpi whitish-orange, basal half of second joint externally and extreme apex of terminal joint dark fuscous. Antennæ dark fuscous. Thorax ochreous-orange, anterior margin very narrowly, a small lateral spot, and larger posterior spot dark fuscous. Abdomen whitish-ochreous, anal tuft orange-ochreous. Anterior and middle legs dark fuscous, apex of joints ochreous; posterior legs whitish-orange-ochreous, tarsal joints greyish towards base. Forewings moderate, costa moderately arched, apex round-pointed, hind-margin oblique, hardly rounded; dark fuscous, with a slight ochreous tinge in disc posteriorly; a broad straight white or ochreous-white transverse fascia from $\frac{1}{4}$ of costa to $\frac{1}{4}$ of inner margin, somewhat contracted on costa; a white semi-oval spot on costa slightly beyond middle, on costal edge whitish-ochreous, reaching half across wing, a white triangular spot on inner margin before anal angle reaching half across wing, its apex a little beyond that of costal spot; a larger irregularly quadrilateral white apical spot, on costal edge whitish-ochreous, leaving a slender dark fuscous streak along hindmarginal edge, its anterior and lower edges parallel to posterior edges of costal and dorsal spots respectively, its lower posterior angle produced into a short tooth; cilia dark fuscous, beneath anal angle and on costa above apical spot whitish-ochreous. Hindwings fuscous-grey; cilia fuscous-grey, above apex whitish-ochreous mixed with grey.

Also not to be confused with any other.

Sydney, in November and December; two specimens amongst dry scrub.

22. ALLODOXA, Meyr.

I am now of opinion that this genus ought to be referred to the *Glyphipterygidae*; I do not possess a male of either of the two species belonging to it, and I anticipate that the antennæ will be found not to be ciliated. The genus nearly approaches *Eupselia*, and is discordant in this family from the 11-veined forewings. The removal will make *Atelosticha* the only 11-veined genus of the family, to which it is nevertheless without doubt truly referable. I do not propose therefore to describe the species of *Allodoxa* here, and it may be struck out.

23. PETALANTHES Meyr.

Head smooth, sidetufts rather small, appressed. Antennæ moderate, in ♂ with long fine cilia (3-4), basal joint rather elongate, moderate, with thin pecten. Palpi rather long, second joint reaching or somewhat exceeding base of antennæ, densely scaled, somewhat loosely beneath, terminal joint as long as second, slender, recurved. Thorax smooth. Forewings elongate, narrow, apex obtuse, hindmargin very obliquely rounded. Hindwings slightly narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{4}$, scaled at base. Abdomen moderate. Middle tibiæ with a dense median whorl of projecting hairs; posterior tibiæ with short stiff hair-scales. Forewings with vein 7 to hindmargin. Hindwings normal.

I am unable to satisfy myself as to the affinity of this curious genus, concerning which more information is required. Structurally it presents no peculiarities, and differs little from *Peltophara*, to which it may be allied. It is however, quite exceptional in the curiously spotted hindwings of two of the species, evidently intended for display, though I know very little of their habits. I have not been able to obtain a specimen for dissection, all the species being retired and scarce, and it is possible the neuration may present further characters.

1a. Forewings with a white discal spot.

2a. Hindwings with a white subapical spot.....124. *hexastera*.

2b. „ without subapical spot.....123. *sphærophora*.

1b. „ without white spot.....125. *periclyta*.

123. *Petal. sphærophora*, n. sp.

Parva, alis ant. nigris, macula disci parva nivea; post. nigris, macula ad basim flavido-cana, altera disci nivea.

♂. 10 mm. Head and thorax blackish-fuscous, face with a few whitish scales. Palpi black, irregularly mixed with white. Antennæ, black, annulated beneath with white. Abdomen dark fuscous, mixed with coppery-metallic scales, with a yellowish-white basal band, and a whitish-yellow band midway between this and apex. Anterior tibiæ black irrorated with white, tarsi black

with white rings at apex of joints; middle and posterior legs whitish-yellow, tibiæ with an oblique dark fuscous band, tarsi dark fuscous with whitish-yellow rings at apex of joints. Forewings elongate, narrow, costa gently arched, apex rounded, hindmargin very oblique rounded; blackish-fuscous; a small somewhat oval snow-white spot obliquely placed in disc beyond middle: cilia blackish-fuscous. Hindwings blackish-fuscous; a round white spot, faintly yellowish-tinged, in inner angle, not quite touching margin; a somewhat smaller oval snow-white spot obliquely placed in middle of disc; cilia grey.

Differs from the following by the wholly blackish ground colour, the absence of the subapical spot of the hindwings, and the two broad abdominal bands.

One specimen on a fence at Sydney in October; Mr. G. H. Raynor took another at Blackheath (3500 feet) in November.

124. *Petal. hexastera*, n. sp.

Parva, alis ant. nigricantibus, flavido-strigulatis, basi, fascia antica, maculaque costæ postica nigris, macula disci parva nivea; post. nigris, macula ad basim ochreo-flava, altera disci partim nivea cum hac in costa conjuncta, tertia postica parva nivea.

♀. $10\frac{1}{2}$ - $11\frac{1}{2}$ mm. Head and thorax dark fuscous, with a few yellow-whitish scales. Palpi black, with a slender white longitudinal line from base to apex on each side, and a third above. Antennæ blackish, with a very fine white longitudinal line above. Abdomen dark fuscous, with a broad whitish-yellow basal band, and four narrow whitish-yellow rings. Anterior legs blackish, irregularly striated with yellowish-white; middle tibiæ blackish, coarsely mixed with yellowish-white, tarsi black with yellowish-white rings at apex of joints; posterior tibiæ whitish-yellow with a dark fuscous apical band, tarsi dark fuscous with basal and apical joints whitish-yellow. Forewings elongate, narrow, costa gently arched, apex rounded, hindmargin very obliquely rounded; blackish-fuscous, with fine clearly marked somewhat irregular transverse yellow-whitish striæ; the absence of these produces a clear blackish narrow patch at base, a narrow

direct transverse fascia at $\frac{2}{5}$, and a costal spot at $\frac{4}{5}$; a small oval snow-white spot transversely placed in disc beyond middle; sometimes an ill-defined whitish-yellow spot on costa beyond $\frac{4}{5}$; cilia blackish-grey, mixed with whitish-yellow points, with a broad blackish line. Hindwings blackish-fuscous, a rather large whitish-yellow or light ochreous-yellow spot at base, connected with a yellowish-white posteriorly attenuated costal streak from base to $\frac{2}{3}$; a transverse fascia-like spot in middle, connected above with costal streak, beneath almost touching lower margin, its upper half snow-white, lower half and extreme upper edge light ochreous-yellow; a small irregular-oval snow-white spot towards apex; cilia grey, with a broad basal blackish band.

Specially characterised by the fine pale strigulae of the forewings, the white subapical spot of the hindwings, and the longitudinally striated palpi. The second of my two specimens sat constantly with the wings half-raised, and the forewings not fully covering the hindwings, but I did not observe this habit in the other individuals of the genus.

One specimen taken at Toowoomba, Queensland (2000 feet), in September, and a second near Hamilton, Victoria, in November; both at rest on trunks of *Eucalyptus*.

125. *Petal. periclyta*, n. sp.

Parva, alis ant. saturate purpureo-fuscis, cupreo-nitentibus, fascia prope basim, macula costae post medium parva alteraque dorsi obscuris dilute ochreis; post. saturate flavis, postice anguste, apicem versus latius nigro-marginatis.

♂. 11 mm. Head and thorax black, thinly strewn with fine whitish-yellow hair-scales, lower part of face and sides of collar whitish-yellow. Palpi black, second joint coarsely mixed with white, terminal joint with an irregular white longitudinal line on each side. Antennae black, annulated with white. Abdomen dark fuscous, violet-shining, beneath whitish-yellow. Anterior tibiae black irrorated with white, middle tibiae black with white median and apical bands, posterior tibiae whitish-yellow, all tarsi

black with white rings at apex of joints. Forewings elongate, narrow, costa gently arched, apex round-pointed, hindmargin very obliquely rounded; dark purple-fuscos, with blue and green reflections, with a transverse patch of raised scales in disc at $\frac{1}{3}$; an ill-defined whitish-ochreous transverse fascia close to base; two or three scattered whitish-ochreous scales in disc below middle; a small ochreous-whitish spot on costa at $\frac{2}{3}$, and a similar less-defined spot on inner margin somewhat before it; an ochreous-whitish dot on costa before apex: cilia dark purple-fuscos. Hindwings deep yellow, apex broadly dark fuscous, with a very narrow dark fuscous border along lower margin; cilia dark grey, with a broad dark fuscous basal line.

A curious species, although the colouring of the hindwings is here of a normal type. The raised scales of the forewings seem natural, but I am not sure that they are really so.

Sydney, in October; one specimen at rest on a fence.

24. LINOSTICHA Meyr.

Head loosely haired, sidetufts large, loosely spreading. Antennæ in ♂ moderate, with long fine cilia (4) on basal half, shorter towards apex, basal joint rather stout, with strong pecten. Palpi moderately long, second joint reaching or somewhat exceeding base of antennæ, with appressed scales, somewhat loose beneath, terminal joint as long as second, slender, recurved. Thorax smooth. Forewings elongate, moderate, apex pointed, hindmargin very oblique. Hindwings somewhat narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{2}{3}$. Abdomen moderate. Posterior tibiæ clothed with fine moderate hairs above. Forewings with vein 7 to apex, 2 almost from angle of cell. Hindwings normal.

Closely allied to *Eulechria*, of which it is doubtless a development, differing essentially only by the long fine ciliations of the antennæ.

- | | |
|-------------------------|--------------------------|
| 1a. Forewings grey..... | 126. <i>scythropha</i> . |
| 1b. „ white..... | 127. <i>canephora</i> . |

126. *Lin. scythropa*, n. sp.

Minor, alis ant. dilutius griseis, sericeis, puncto disci nigro ; post. griseis.

♂ ♀. $13\frac{1}{2}$ - $15\frac{1}{2}$ mm. Head, palpi, antennæ, thorax, and abdomen rather light glossy grey, inner side of palpi and apex of abdomen whitish, terminal joint of palpi anteriorly dark fuscous. Anterior and middle legs rather dark grey, posterior legs ochreous-whitish. Forewings moderate, costa gently arched, apex acute, hindmargin straight, very oblique uniform light glossy grey ; a blackish dot in disc beyond middle, generally distinct, sometimes nearly obsolete ; cilia glossy whitish-grey. Hindwings fuscous-grey. darker towards apex ; cilia grey-whitish, with an indistinct grey line near base.

An inconspicuous species, somewhat resembling *Eulechria achalinella*.

Common round Sydney amongst dry scrub in November ; also met with at Blackheath (3500 feet) in January.

127. *Lin. canephora*, n. sp.

Minor, alis ant. niveis, partim griseo-sparsis, triangulo dorsi ad basim, macula dorsi postica elongata magna lineaque postica angulata saturate griseis, punctis disci tribus nigricantibus ; post. albido-griseis.

♂ ♀. 17-18 mm. Head, palpi, antennæ, thorax, abdomen, and legs white ; thorax with a suffused fuscous-grey spot on each side of back ; anterior legs dark fuscous above, apex of joints white. Forewings elongate, costa gently arched, slightly sinuate in middle, apex round-pointed, hindmargin very obliquely rounded ; white ; costal edge dark fuscous at base ; a slender fuscous-grey suffusion beneath costa from $\frac{1}{4}$ to beyond middle ; a suffused dark-grey oblique triangular blotch on inner margin towards base, reaching half across wing, mixed with blackish above and posteriorly ; a large grey oblong blotch extending on inner margin from $\frac{1}{3}$ to anal angle, anteriorly mixed with blackish and connected with a small blackish spot in disc before middle, posteriorly more or less suffused and ill-defined ; two cloudy dark fuscous dots transversely placed



in disc beyond middle, connected with costa beyond middle by a few grey scales; a cloudy dark fuscous-grey outwards-angulated transverse line from costa at $\frac{3}{4}$ to hindmargin above anal angle; beyond this some scattered grey scales; a row of cloudy almost confluent dark fuscous dots along hindmargin and apical fourth of costa: cilia white, with a few grey spots. Hindwings pale whitish-grey, under surface white; cilia white.

Very distinct and easily recognisable.

One specimen taken at Launceston, Tasmania, at the end of January; a second near Mount Gambier, South Australia, in November.

25. PHRICONYMA Meyr.

Head loosely haired, sidetufts moderately large, loosely spreading. Antennæ in ♂ moderate, moderately and evenly ciliated (1), basal joint moderate, with strong pecten. Palpi moderate, second joint hardly reaching base of antennæ, beneath dilated with roughly projecting laterally compressed scales on apical half, terminal joint shorter than second, moderate, recurved. Thorax smooth. Forewings elongate, moderate, apex obtusely pointed, hindmargin very oblique. Hindwings somewhat narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{4}{5}$. Abdomen elongate. Posterior tibiæ clothed with long hairs above. Forewings with vein 7 to apex, 2 with 3 from angle of cell, upper fork of 1 obsolete. Hindwings with veins 3 and 4 short-stalked.

Also near *Eulechria*, differing in the peculiarities of neururation, and the projecting scales of the second joint of palpi; also certainly related to *Locheutis*. It is probably a direct offshoot of *Eulechria*.

128. *Phric. lucifuga*, n. sp.

Minor, alis ant. griseis, leviter nigro-sparsis, punctis disci tribus nigris; post. griseis; capite cano.

♂ ♀. 15½-18 mm. Head white, mixed with grey on crown. Palpi dark grey, terminal joint and apex of second mixed with white. Antennæ dark fuscous. Thorax fuscous-grey, sometimes irrorated with blackish. Abdomen whitish-grey. Anterior and middle legs dark grey; posterior tibiæ grey-whitish, tarsi grey with

whitish rings at apex of joints. Forewings elongate, narrow. costa slightly arched, apex round-pointed, hindmargin very obliquely rounded; dull grey, thinly irrorated with blackish; a small black dot in disc before middle, another obliquely somewhat before it on fold, and a third larger and more conspicuous in disc beyond middle; cilia light grey, irrorated with blackish. Hindwings grey; cilia light grey.

An obscure species, liable to be overlooked.

Blackheath, New South Wales (3500 feet), in January and March; tolerably common.

25*. LOCHEUTIS n. g.

Head with appressed scales, sidetufts rather small loosely appressed. Antennæ in ♂ moderate, somewhat serrate, with whorls of long cilia ($2\frac{1}{2}$ -4), basal joint moderate, without pecten. Palpi moderately long, second joint somewhat exceeding base of antennæ, thickened with dense appressed scales, somewhat rough beneath, terminal joint shorter than second, moderate, recurved. Thorax smooth. Forewings elongate, apex rounded, hindmargin very obliquely rounded. Hindwings slightly narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{4}$ to 1. Abdomen moderate. Posterior tibiæ clothed with rather short dense hairs above. Forewings with vein 7 to apex, 2 from before apex of cell. Hindwings normal.

This genus is not included in the analytical tabulation, as I have only recently obtained the species on which it is founded. It is allied to *Eulechria*, differing in the long ciliations of the antennæ, and the absence of the basal pecten. In the tabulation it should be referred to the same head as *Linosticha* and *Macronemata*, but distinguished from both by the absence of the pecten. It may be regarded at partially intermediate between *Phloeopola* and *Eulechria*; I consider it to be probably an offshoot from a genus (perhaps extinct) which should connect these two. Further material is required to decide the affinities of these small allied genera. This genus is as yet exclusively Tasmanian.

- 1a. Forewings with a whitish-yellow anterior fascia..131. *ancyrota*.
 1b. „ without pale fascia.
 2a. Forewings with a suffused dark fascia enclosing
 a pale discal spot.....130. *desmophora*.
 2b. „ not fasciated.....129. *philochora*.

129. *Loch philochora*, n. sp.

Minor, alis ant. griseis, albido-ochreo conspersis, macula costæ ad basin parva, punctis costæ duobus, disci tribus, lineaque postica transversa sæpius obsoleta nigricantibus; post. griseis.

♂. 12½-15 mm. Head whitish-ochreous. Palpi dark-fuscous, apex of second joint whitish-ochreous. Antennæ dark-fuscous. Thorax grey, mixed with whitish-ochreous towards shoulders. Abdomen pale ochreous-grey. Legs dark fuscous, posterior tibiæ and apex of all tarsal joints obscurely ochreous-whitish. Forewings elongate, costa slightly arched, somewhat bent near base, apex round-pointed, hindmargin very obliquely rounded; grey, irrorated with whitish-ochreous; an oblong black spot along costa at base; costal edge blackish from base to middle, a small blackish spot on costa at $\frac{1}{3}$, another somewhat beyond middle, and a third a little before apex; a black dot in disc before middle, a second hardly beyond middle, and a third obliquely before first on fold; a very obscure dark fuscous transverse line from ante-apical costal spot to anal angle, sharply indented inwards beneath costa, often obsolete: cilia grey, mixed with whitish-ochreous towards base. Hindwings fuscous-grey, apex somewhat darker; cilia light fuscous-grey.

Readily distinguished from *L. desmophora* by the lighter and more uniform grey colouring, the sharply-defined basal spot, the distinctness of the other dots, and the absence of any darker transverse shade.

Abundant round Deloraine Tasmania, in November, especially along the roadsides, but I observed it nowhere else; the ♂ is active and readily disturbed by day, but I failed to obtain the other sex.

130. *Loch. desmophora*, n. sp.

Minor, alis ant. fuscis, albido nigroque conspersis, macula costæ parva, punctis disci duobus anticis, fascia nebulosa punctum albidum includente, lineaque postica transversa obscura nigrescentibus; post. saturate griseis.

♂. 12-15 mm. Head and thorax whitish-grey, mixed with dark fuscous. Palpi dark fuscous, mixed with whitish-grey, apex of second joint whitish. Antennæ dark fuscous. Abdomen light grey. Legs dark fuscous, apex of all joints, central band of middle tibiæ, and hairs of posterior tibiæ ochreous-white. Forewings elongate, costa slightly arched, somewhat bent near base, apex round-pointed, hindmargin very obliquely rounded; fuscous, densely irrorated with ochreous-whitish and with scattered black scales; base of costa and inner-margin blackish-fuscous; a small blackish-fuscous spot on costa before $\frac{1}{3}$, a blackish dot in disc before middle, and another obliquely before it on fold, all three sometimes confluent; a triangular blackish-fuscous spot on costa somewhat beyond middle, connected with inner margin before anal angle by a cloudy dark fuscous shade, containing a white or whitish dot in disc, margined above by a blackish dot; a cloudy blackish-fuscous transverse line from costa a little before apex to anal angle, dilated on costa and sharply indented beneath it, often obscure; cilia fuscous-grey mixed with ochreous-whitish, tips ochreous-whitish. Hindwings dark fuscous-grey; cilia light fuscous-grey, tips pale.

Closely allied to the preceding, but differing in the fuscous colouring, more suffused markings, the transverse darker shade beyond middle and included whitish dot, and darker hindwings.

Mount Wellington, Tasmania, at about 1000 feet; seven specimens.

131. *Loch. ancyrota*, n. sp.

Minor, alis ant. purpureo-griseis, nigro-conspersis, puncto dorsi antico, altero costæ postico, fascia antica oblique interrupta, strigaeque dorsi postica deflexa albido-flavis; post. saturate griseis.

♂ ♀. 11-14 mm. Head and thorax dark fuscous, slightly mixed with whitish, face white. Palpi whitish-yellow, terminal joint

and extreme base and apex of second joint black. Antennæ dark fuscous, in ♀ annulated with whitish-yellow. Abdomen dark fuscous. Legs dark fuscous, central ring of anterior and middle tibiæ and apex of all joints yellowish-white, hairs of posterior tibiæ whitish. Forewings moderate, costa gently arched, somewhat bent near base, apex rounded, hindmargin very obliquely rounded; purplish-grey, very finely irrorated with black, most densely on costa and hindmargin; a very small whitish-yellow spot on inner margin at $\frac{1}{4}$; a straight narrow whitish-yellow fascia from $\frac{1}{4}$ of costa to middle of inner margin, interrupted on fold; a narrow whitish-yellow streak from lower extremity of this to disc beyond and below middle, its posterior extremity connected with anal angle by some irregular whitish-yellow scales; a very small whitish-yellow spot on costa at $\frac{3}{4}$: cilia purplish-grey, mixed with black towards base, with a darker line. Hindwings and cilia dark grey.

Unlike any other species in marking.

Deloraine, Tasmania; nine specimens beaten from *Leptospermum scoparium* in swamp in November.

26. IOPTERA Meyr.

Head with appressed scales, sidetufts large, loosely spreading, meeting above. Antennæ in ♂ stout, serrate, with extremely long and fine dense cilia (7), basal joint stout, short, with strong pecten. Palpi rather short, second joint not nearly reaching base of antennæ, with appressed scales, beneath dilated to form a short angular projection at apex, somewhat rough beneath; terminal joint as long as second, slender, oblique. Thorax smooth. Forewings elongate, narrow, apex obtusely pointed, hindmargin straight, very oblique. Hindwings as broad as forewings, elongate, parallel-sided, hindmargin slightly rounded, cilia $\frac{3}{4}$. Abdomen elongate, somewhat flattened. Legs very elongate, posterior tibiæ clothed with rather long hairs above. Forewings with vein 7 to apex, 2 from angle of cell. Hindwings normal.

Probably a development from *Linosticha*, with exaggerated characteristics; the antennal ciliations reach their maximum in this genus.

132. *Iopt. aristogona*, n. sp.

Media, alis ant. fuscis, albido-conspersis, maculis sub costa quinque parvis, strigulis disci longitudinalibus plerisque, signoque disci postico transverso cum dorso connexo nigrescentibus; post. dilute griseis.

♂. 22 mm. Head white mixed with grey, crown dark grey. Palpi fuscous-grey, terminal joint and extreme apex of second mixed with white, second joint internally suffused with white. Antennæ ochreous-whitish. Thorax fuscous-grey mixed with white. Abdomen ochreous-whitish. Anterior and middle legs dark fuscous-grey, posterior legs ochreous-whitish. Forewings very elongate, narrow, costa very slightly arched, somewhat sinuate beyond middle, apex round-pointed, hindmargin very oblique, slightly rounded; rather light brownish-grey, thickly and irregularly strewn with white, more scantily along costa and inner margin; four small ill-defined blackish spots below costa between middle and apex; a short cloudy blackish oblique streak beneath costa about $\frac{1}{4}$, and three others more clearly defined beneath the first three subcostal spots; inner margin broadly and irregularly irrorated with blackish; two or three ill-defined longitudinal streaks of blackish scales in disc; a transverse blackish mark in disc at $\frac{3}{5}$, emitting two slightly diverging cloudy blackish lines directly to inner margin; a small cloudy blackish oval spot in disc beyond this; cilia grey-whitish, with a broad cloudy fuscous-grey median line. Hindwings pale fuscous-grey; cilia whitish, with a broad suffused light grey median shade.

A distinct and rather elegant species.

Sydney, in April; one fine specimen at rest on a fence.

27. MACRONEMATA Meyr.

Head smooth, sidetufts rather small, loosely spreading behind. Antennæ in ♂ moderate, somewhat serrate, strongly ciliated (3), basal joint rather stout, with strong pecten. Palpi moderate, second joint not reaching base of antennæ, densely scaled, somewhat loosely beneath, terminal joint rather shorter than second,

moderate, recurved Thorax smooth. Forewings elongate, moderate, apex obtusely pointed, hindmargin very obliquely rounded. Hindwings rather narrower than forewings, elongate-ovate, hindmargin rounded, cilia 1. Abdomen dilated, distinctly flattened. Posterior tibiæ clothed with dense moderate hairs above. Forewings with vein 7 to apex, 2 from near angle of cell. Hindwings normal.

Closely allied to *Linosticha*, of which it is probably an off-shoot; it differs from *Linosticha* principally by the second joint of palpi not reaching base of antennæ, the terminal joint rather shorter than second (so that the whole palpi are considerably shorter), and the somewhat flattened abdomen. The species are small and very inconspicuous.

1a. Forewings nearly unicolorous fuscous.....133. *lopelictes*.

1b. „ pale greyish-ochreous, with black dots 134. *elaphia*.

133. *Macr. lopelictes*, n. sp.

Parva, alis ant. saturatius fuscis; post. saturatius fuscis.

♂ ♀. 10-11 mm. Head, palpi, antennæ, thorax, and abdomen fuscous, somewhat mixed with paler. Legs fuscous, posterior tibiæ whitish-ochreous, and tarsi with ochreous-whitish rings at apex of joints. Forewings moderate, costa moderately arched, apex pointed, hindmargin very oblique, slightly rounded; fuscous or dark fuscous, finely irrorated with paler; cilia fuscous. Hindwings dark fuscous; cilia fuscous, with an indistinct darker line near base.

A very obscure-looking insect.

Toowoomba, Queensland; three specimens in September.

134. *Macr. elaphia*, n. sp.

Parva, alis ant. dilute griseis, albido-ochreo conspersis, leviter nigro-sparsis, puncto disci postica majore nigro; post. dilute griseis.

♂. 10½-11½ mm. Head, palpi, and thorax whitish-ochreous, second joint of palpi externally suffused with dark fuscous. Antennæ dark fuscous. Abdomen pale grey. Legs dark fuscous, posterior tibiæ ochreous-grey-whitish, apex of all tarsal joints ochreous-whitish. Forewings elongate, costa moderately arched.

apex round-pointed, hindmargin extremely obliquely rounded: light grey, densely irrorated and costa suffused with pale whitish-ochreous; base of costa black; some scattered black scales, especially towards apex, and sometimes seeming to form a dot in disc before middle, and another obliquely before it on fold; a larger blackish dot in disc beyond middle: cilia pale grey, irrorated with pale whitish-ochreous. Hindwings light grey; cilia whitish-grey, with a faint darker line.

Near the preceding, but cannot be confused with it.

Hobart and Deloraine, Tasmania, in November and December; common but local.

28. *PHLÆOPOLA* Meyr.

Head with loosely appressed scales, sidetufts large, loosely spreading. Antennæ in ♂ moderately stout, somewhat serrate, moderately ciliated ($\frac{2}{3}$ -2), basal joint rather elongate, moderate, without pecten. Palpi long or rather long, second joint reaching or exceeding base of antennæ, dilated with dense appressed scales, slightly rough beneath, terminal joint as long as second or somewhat shorter, moderate or stout, strongly recurved. Thorax with dense posterior crest. Forewings elongate, moderate, apex bluntly rounded, hindmargin oblique. Hindwings as broad as forewings or somewhat narrower, elongate ovate, hindmargin rounded, cilia $\frac{1}{2}$ to $\frac{2}{3}$. Abdomen moderate, strongly margined. Middle tibiæ with a median whorl of projecting hairs, and roughly short-haired beneath; posterior tibiæ clothed with long dense hairs above. Forewings with vein 7 to apex, 2 from angle of cell. Hindwings normal.

This genus appears to form the nearest representative of the transitional stage between the two main groups of the family, that of *Oecophora* on the one hand, and that of *Eulechria* and *Philobota* on the other. It is therefore of considerable importance. The apex of the forewings is in most of the species peculiarly rounded, so that it is difficult to determine where the exact apical point is, and the termination of vein 7 appears therefore in some cases to fluctuate between the costa and hindmargin. It is then easy to

understand how, when such a form of wing had prevailed for some moderate period, when again species with more pointed (but on the whole somewhat broader) wings were produced, the termination of vein 7 was found to have slipped round from the costa to the hindmargin, and thus another type was established, of which the hindmarginal termination was the most persistent character. It should be observed that there are strictly only these two types, the apical termination being properly regarded as a special case of the hindmarginal. *Phlæopola* may be considered as a development from *Oecophora* itself (but not immediate, a connecting link being required), and as closely approaching the parent form of *Eulechria*; it differs from both by the strong thoracic crest, and the absence of the antennal pecten, both of which characters, however, recur in several of the allied genera. The genus should be of very considerable antiquity. There is one New Zealand species; the Australian species are principally southern, and especially Tasmanian. There is considerable reason to suppose that the larvæ feed in bark or dead wood, as with many species of *Oecophora*.

I have at present twelve species, of which the following is a tabulation:—

- 1a. Hindwings with a darker central lunule...135. *dinocosma*.
- 1b. „ without darker lunule.
- 2a. Hindwings whitish-yellow, at least towards
base.....141. *confusella*.
- 2b. „ fuscous or grey.
- 3a. Forewings snow-white.....142. *synchyta*.
- 3b. „ more or less greyish or ochreous-
tinged.
- 4a. With a large clear blackish dorsal triangle...146. *melanodelta*.
- 4b. Without defined dorsal spot.
- 5a. Forewings strongly dilated posteriorly.
- 6a. Costal spots suffusedly darker.
- 7a. With a blackish streak from costa along fold..137. *semocausta*.
- 7b. Without streak on fold.
- 8a. Antennæ dark fuscous.....136. *asbolea*.
- 8b. „ annulated with whitish-ochreous...138. *helica*.

- 6b. Antennæ tolerably well-defined blackish.
 7a. Forewings short 140. *turbatella*.
 7b. „ elongate..... 139. *psephophora*.
 5b. „ not or slightly dilated.
 6a. Ground colour grey-whitish..... 145. *lithoglypta*.
 6b. „ whitish-ochreous,
 7a. Palpi mostly whitish-ochreous..... 144. *exarcha*.
 7b. „ wholly dark-fuscous..... 143. *banausa*.

135. *Phloe, dinocosma*, Meyr.

Media, alis ant. fuscis, ochreo-nebulosis, costa partim, dorsi basi, maculis disci tribus strigulaque media nigrantibus; post. albido-griseis, lunula media saturatiore.

Immediately distinguished from all others by the distinct darker lunule of the hindwings, a very rare characteristic in the family; the discal markings are much as in *Phloe. semocausta*.

Wellington, New Zealand; one specimen in January.

136. *Phloe. asbolaea*, n. sp.

Media, alis ant. fuscis, apice saturatiore, margine costali punctisque disci tribus longitudinaliter positis atque albido-ochreo disjunctis, quarta etiam plicae nigrescentibus; post. saturate griseis.

♂. 23 mm. Head and thorax whitish-ochreous suffused with dark fuscous. Palpi whitish-ochreous, strongly mixed with dark fuscous, terminal joint, and basal half and subapical ring of second joint dark fuscous. Antennæ dark fuscous. Abdomen grey. Legs dark fuscous, central ring of middle tibiæ and apex of all joints slenderly whitish, hairs of posterior tibiæ grey-whitish. Forewings elongate, posteriorly moderately dilated, costa gently arched, apex rounded, hindmargin obliquely rounded whitish-ochreous, almost wholly suffused with pale fuscous, and mixed with fuscous and dark fuscous; costal edge blackish-fuscous; some cloudy irregular dark fuscous spots towards base; a small round blackish-fuscous spot in disc before middle, a second in middle, and a third beyond middle, lying in a straight line, and separated by clear whitish-ochreous-spots; a fourth on fold obliquely before first; a cloudy

fuscous suffusion towards apex, its inner edge indicating the usual transverse indented line : cilia whitish-ochreous, suffusedly mixed with light fuscous, base suffused with dark-fuscous. Hindwings dark grey ; cilia grey.

In the general dark suffusion this species resembles some forms of *Phloe. banausa*, which latter is always recognisable by the thickened terminal joint of the palpi, it differs however from all in the arrangement of the discal dots, and their separation by whitish-ochreous dots.

Deloraine, Tasmania ; one good specimen in November.

137. *Phloe. semocausta*, n. sp.

Media, alis ant. albido-ochreis, fusco-mixtis, striga e costæ basi perobliqua, punctis disci tribus strigulaque media, serie etiam marginis postici nigrescentibus, maculis costæ duabus serieque punctorum postica flexuosa nebulosis fuscis ; post. griseis.

♂. 20-24 mm. Head whitish-ochreous. Palpi whitish-ochreous, with terminal joints towards base, and a subapical ring and basal half of second joint dark fuscous. Antennæ fuscous, ciliations 2. Thorax whitish-ochreous, anterior margin suffused with dark fuscous. Abdomen ochreous-whitish, mixed with grey. Legs dark fuscous, central ring of middle tibiæ, hairs of posterior tibiæ, and apex of all joints whitish-ochreous. Forewings rather elongate, broadly dilated posteriorly, costa moderately arched, apex rounded, hindmargin straight or very slightly sinuate, oblique ; pale whitish-ochreous, irrorated with grey and dark fuscous scales ; a thick blackish suffused streak from base of costa along fold to $\frac{1}{3}$; a blackish dot on base of inner margin ; a cloudy fuscous suffusion along basal half of costa, darker posteriorly ; a cloudy fuscous oblong spot on costa somewhat beyond middle ; a cloudy blackish-fuscous dot in disc at $\frac{1}{3}$ above and beyond apex of basal streak, and a short blackish fuscous transverse mark in disc beyond middle ; between these is a short longitudinal blackish-fuscous line, beneath posterior extremity of which is a blackish-fuscous dot ; a transverse outwards-curved line of cloudy dark fuscous nearly confluent dots from $\frac{4}{5}$ of costa to before anal angle,

sharply indented inwards above middle; a hindmarginal row of well-defined dark fuscous dots; cilia pale whitish-ochreous, towards base very obscurely spotted with fuscous, and with a fuscous-grey median line. Hindwings grey, base lighter; cilia whitish-ochreous, with a broad suffused grey line.

Distinguished from all by the suffused dark fuscous streak from base of costa along fold; it has also the forewings more broadly dilated, and the ciliations of the antennæ longer, than in any other species; the transverse form of the posterior discal dot, the short longitudinal streak in disc between the dots, and the well-defined series of dots on the hindmargin, are also reliable characteristics.

Deloraine, Tasmania; five specimens taken in November, flying after dusk on the river-bank.

138. *Phloe. helica*, n. sp.

Media, alis ant. ochreo-albidis, ochreo-fusco nigroque irroratis, maculis costæ tribus obscuris fuscis, strigula dorsi antica maculaque costæ postica pallidis, punctis disci quinque nigris; post. griseis.

♂. 23 mm. Head whitish-ochreous, crown suffused with fuscous. Palpi ochreous-whitish, basal half and a subapical ring of second joint, and basal third of terminal joint dark fuscous. Antennæ whitish-ochreous, annulated with dark fuscous. Thorax dark fuscous, mixed with ochreous-whitish. Abdomen ochreous-whitish. Legs dark fuscous, central ring of middle tibiæ and apex of all joints whitish-ochreous, hairs of posterior tibiæ grey-whitish. Forewings elongate, posteriorly considerably dilated, costa moderately arched, apex obtuse, hindmargin straight, oblique; ochreous-whitish, densely irrorated with ochreous-brown and blackish scales; a very ill-defined cloudy dark fuscous triangular spot on costa at $\frac{1}{3}$, another somewhat beyond middle, and a third, larger and with the apex black, on costa before apex; between the second and third the costal space is clear ochreous-whitish; an oblique whitish mark on inner margin at $\frac{1}{4}$, surrounded by a darker suffusion; a sharply-defined partially pale-margined black dot in disc at $\frac{1}{3}$, a second in middle, and a third considerably larger beyond middle; a fourth on fold directly beneath first, and a fifth,

less defined, between fourth and second ; hindmarginal space paler, through absence of blackish irroration ; cilia ochreous-whitish, mixed with blackish, forming obscure transverse bars. Hindwings grey ; cilia ochreous-whitish suffused with grey.

Superficially most like *Phloe. asbolaea*, but with the dark suffusion incomplete, the discal dots not connected by pale spots yet more clearly defined, the forewings more strongly dilated, and with the apex less rounded and hindmargin straight, and the antennæ annulated with whitish-ochreous.

Deloraine, Tasmania ; one fine specimen November.

139 *Phloe. psephophora*, n. sp.

Media, alis ant. albido-ochreis, griseo-suffusis, costa pallida, strigula costæ ad basim obliqua, altera ante medium reversa, puncto costæ medio, aliis disci quatuor, lineaque postica transversa flexuosa nigris ; post. griseis.

♂. 16-21 mm. Head pale yellowish-ochreous. Palpi pale yellowish-ochreous, basal $\frac{2}{3}$ and a subapical ring of second joint, and more or less of terminal joint externally black. Antennæ fuscous or dark fuscous. Thorax dark fuscous, with a large whitish-ochreous spot on each side. Abdomen grey. Legs dark fuscous, apex of joints and hairs of posterior tibiæ grey-whitish. Forewings elongate, posteriorly moderately dilated, costa gently arched, apex rounded, hindmargin rather strongly oblique, rounded ; whitish-ochreous, suffused with light grey ; costal edge usually clear whitish-ochreous ; a short narrow very oblique black streak from base of costa above fold ; a short slender inwardly oblique black streak from costa at $\frac{1}{3}$, almost reaching apex of basal streak ; a small elongate blackish spot on costa somewhat beyond middle ; a small blackish spot at base of inner margin, generally separated from costal streak by a small clear whitish-ochreous spot ; a black dot on inner margin near base ; a black dot in disc before middle, a second beyond middle, a third on fold very obliquely before first, and fourth in disc below middle ; immediately beneath the second is a clear ochreous-whitish dot ; a strongly outwards-curved waved blackish-fuscous transverse line from costa at $\frac{4}{5}$ to inner margin

before anal angle, sharply indented inwards above middle; a slender fuscous streak from apex along upper half of hindmargin; cilia whitish-ochreous, suffused with light grey, obscurely barred with dark fuscous towards base on upper half of hindmargin and above apex. Hindwings grey; cilia pale grey.

Easily recognised by the general neatness and clearness of all markings, the two converging anterior strigulae from the costa, the arrangement of the discal dots, and the more yellowish head.

Common at Deloraine, and up to 1200 feet on Mount Wellington, Tasmania, from November to January.

140. *Phloe. turbatella*, Walk.

(*Cryptolechia turbatella*, Walk., Brit. Mus. Cat., 765.)

Media, alis ant. dilute griseo-ochreis, fusco-nebulosis, maculis costae duabus, tertia dorsi antica, punctis ad basim plerisque, disci tribus, lineaque postica flexuosa nigrescentibus; post. griseis.

♂ ♀. 17-19 mm. Head whitish-ochreous, crown suffused with dark fuscous. Palpi whitish-ochreous mixed with dark fuscous, basal half and subapical ring of second joint dark fuscous. Antennae pale greyish-ochreous, obscurely ringed with dark fuscous, ciliations in ♂ whorled. Thorax blackish-fuscous, slightly mixed with pale ochreous, with suffused whitish-ochreous lateral and posterior spots. Abdomen whitish-ochreous. Legs dark fuscous, central ring of tibiae, apex of all joints, and hairs of posterior tibiae, whitish-ochreous. Forewings moderate, posteriorly distinctly dilated, costa moderately arched, apex rounded, hindmargin obliquely rounded; pale dull whitish-grey-ochreous, irregularly irrorated with blackish-fuscous; four or five small irregular variable blackish spots towards base; a narrow suffused often indistinct dark fuscous fascia from $\frac{1}{4}$ of costa to $\frac{1}{3}$ of inner margin, including a small blackish spot on costa, another in disc, and a third rather larger on fold; a small suffused blackish spot on costa slightly beyond middle; a small black spot in disc beyond middle, and a smaller less distinct spot oblique beneath and before it, sometimes partially confluent; these are sometimes connected with second costal spot by a fuscous shade; an indistinct fuscous

suffusion above anal angle; a transverse row of suffused partially confluent blackish-fuscous spots from costa at $\frac{4}{5}$ to before anal angle; outwards-curved, dilated on costa, sharply indented inwards above middle: a hindmarginal row of very suffused dark fuscous spots: cilia pale whitish-ochreous, basal half obscurely barred with dark fuscous. Hindwings fuscous-grey, paler towards base; cilia grey-whitish, with an indistinct grey line.

Proportionately shorter-winged than any other species; well characterised also by the conspicuous blackish costal spots, (larger and coarser than in *Phloe. psephophora*), and the tendency of the discal dots to form with these transverse fasciæ.

Brisbane, Sydney and Melbourne, from September to December; tolerably common, principally at light. Walker's type is said to be from Tasmania, which is not unlikely.

141. *Phloe. confusella*, Walk.

(*Oecophora confusella*, Walk., Brit. Mus. Cat., 682.)

Major, alis ant. ochreo-albidis, fusco-sparsis, fascia antica lata perobliqua, altera post medium abbreviata cum tertia ex apice conjuncta, macula costæ parva antica punctisque disci duobus saturate fuscis; post. albido-flavis, apicem versus griseo-suffusis.

♂ ♀., 18-27 mm. Head dark fuscous, face whitish-ochreous. Palpi whitish-ochreous, basal half and subapical ring of second joint dark fuscous, terminal joint dark fuscous except extreme base and apex. Antennæ dark fuscous. Thorax dark fuscous, with small lateral and posterior ochreous-whitish spots. Abdomen whitish-yellow. Legs dark fuscous, central ring of tibiæ, apex of all joints, and hairs of posterior tibiæ whitish yellowish. Forewings moderate, costa gently arched, apex rounded, hindmargin obliquely rounded; ochreous-white, coarsely irrorated with dark fuscous; a rather broad irregular-edged dark fuscous fascia from costa almost at base to $\frac{1}{3}$ of inner margin, considerably dilated beneath; a small oblique cloudy dark fuscous spot on costa at $\frac{1}{3}$; a large blackish dot in disc before middle, and another below middle; a moderately broad irregular dark fuscous fascia, attenuated beneath costa, from costa beyond middle almost to anal angle;

a broad inwardly oblique dark fuscous blotch from costa before apex, confluent with extremity of central fascia, emitting from middle of posterior edge a partially interrupted dark fuscous line very near hindmargin to inner margin before anal angle; a hindmarginal row of ill-defined dark fuscous dots: cilia ochreous-whitish, mixed with grey, with a suffused grey line, basal half obscurely barred with dark fuscous. Hindwings whitish-yellowish, towards apex more or less broadly suffused with grey; cilia whitish, more yellowish towards base, with an indistinct grey line, and sometimes a second before tips.

Very distinct by the pale yellowish hindwings, and broad oblique anterior fascia.

Sydney and Melbourne, in December and January; locally common at rest on the trunks of *Eucalyptus*, especially in the Sydney parks.

142. *Phloe. synchyta*, n. sp.

Media, alis ant. niveis, costæ basi lineaque prope basim obliqua nigrescentibus, disco usque ad dorsum fusco-suffuso, macula costæ post medium parva alteraque postica angulum analem versus producta saturate fuscis; post. griseis.

♂ ♀. 16½-19 mm. Head snow-white. Palpi white, base and a slender subapical ring of second joint dark fuscous, terminal joint dark fuscous except towards base. Antennæ whitish, obscurely ringed with fuscous. Thorax dark fuscous, with a small white spot on each side, and a larger one behind. Abdomen ochreous-whitish. Anterior and middle legs dark fuscous, central ring of tibiæ and apex of all joints whitish; posterior legs ochreous-whitish. Forewings rather elongate, costa gently arched, apex round-pointed, hindmargin very obliquely rounded; snow-white, thinly and irregularly strewn with dark fuscous scales; a very small dark fuscous spot at base of costa; a sharply-defined slender dark fuscous streak from inner margin almost at base to costa at $\frac{1}{4}$, somewhat inwards-curved, with a blunt tooth projecting towards basal spot, and interrupted immediately below costa; a small irregular dark fuscous spot on costa slightly beyond middle; an irregular variable cloudy fuscous suffusion in middle of disc,

extending to inner margin, containing one or two darker spots, and leaving a small white spot in disc beyond middle; a broad inwardly oblique ill-defined dark fuscous blotch from costa before apex, sometimes confluent beneath with discal suffusion, lighter and more suffused towards disc; two or three small dark fuscous spots near lower part of hindmargin: cilia white, towards tips mixed with grey, on basal half barred with dark fuscous. Hindwings rather light fuscous-grey; cilia grey-whitish.

Conspicuously distinct from all by the clear white ground colour, and the dark inwards-curved transverse streak from near base of inner margin.

Sydney, in January; three specimens at rest on tree trunks.

143. *Phloe. banausa*, n. sp.

Media, alis ant. dilute ochreis, saturate fusco-nebulosis, maculis costæ duabus, tertia postica magna lineam transversam emittente, quarta dorsi, antica punctisque disci tribus nigrescentibus, puncto disci ochreo-albido; post. albido-griseis; palporum articulo apicali incrassato.

♂ ♀. 18-22 mm. Head whitish-ochreous, with a dark fuscous spot above each eye. Palpi wholly dark fuscous, terminal joint considerably thickened. Antennæ fuscous. Thorax dark fuscous, slightly mixed with pale ochreous, with whitish-ochreous lateral and posterior spots. Abdomen whitish-ochreous. Legs dark fuscous, central ring of tibiæ, apex of all joints, and hairs of posterior tibiæ whitish-ochreous. Forewings elongate, moderate, slightly dilated, costa moderately arched, apex rounded, hindmargin obliquely rounded; whitish-ochreous, coarsely irrorated with dark fuscous, and irregularly suffused with light fuscous in disc and towards base; several small irregular dark fuscous spots at base; a suffused irregular dark fuscous spot on costa at $\frac{1}{3}$, another slightly beyond middle, and a third, larger and more suffused, on inner margin before middle; a small round dark fuscous spot in disc at $\frac{1}{3}$, and a second on fold rather before it, more or less confluent with dorsal blotch; a third similar spot beneath costa about middle, and a fourth in disc beyond middle, more or less absorbed

in discal suffusion; beneath the fourth is a small clear whitish-ochreous dot; a broad inwardly oblique dark fuscous blotch from costa before apex, preceded by a clear whitish-ochreous spot on costa, and emitting a suffused dark fuscous attenuated streak to before anal angle; the narrow hindmarginal space beyond this is clear whitish-ochreous; a row of small triangular dark fuscous spots along hindmargin: cilia whitish-ochreous, posteriorly suffused with grey, basal half obscurely barred with dark fuscous. Hindwings whitish-grey, apex somewhat darker; cilia whitish-grey, base pale.

Var. *a*. Head suffused above with dark fuscous; markings of forewings almost wholly lost in general dark fuscous suffusion. Hindwings grey.

Var. *b*. Similar to var. *a*, but with the whitish discal dot well-defined.

Although variable in respect of the dark fuscous suffusion, always immediately recognisable by the palpi, which are wholly dark fuscous, with the terminal joint peculiarly thickened.

Common; the typical form taken at Sydney and Blackheath (3,500 feet) in New South Wales, and Melbourne and Fernshaw in Victoria; var. *a*. at Deloraine, Tasmania (two specimens); var. *b*. at Adelaide (four specimens); from September to November.

144. *Phloe. exarcha*, n. sp.

Major, alis ant. albido-ochreis, ochreo-fusco suffusis, nigro-irroratis, strigula costæ ad basim obliqua, maculis costæ duabus, punctis disci quatuor (quarto majusculo), lineaque postica nebulosa nigrescentibus; post. griseis, basin versus dilutioribus.

♂. 27 mm. Head whitish-ochreous. Palpi whitish-ochreous, externally sprinkled with dark fuscous, basal $\frac{2}{5}$ of second joint and a median band of terminal joint dark fuscous. Antennæ greyish-ochreous. Thorax whitish-ochreous, mixed with brownish, anterior margin and a mark on each side of back blackish-fuscous. Abdomen whitish-grey. Legs dark fuscous, central ring of tibiæ and apex of all joints whitish-ochreous, hairs of posterior tibiæ ochreous-whitish. Forewings rather elongate, moderate, costa gently

arched, apex rounded, hindmargin obliquely rounded; whitish-ochreous, irregularly suffused with ochreous-brown, and irrorated with blackish: a short very oblique black mark from base of costa; a cloudy blackish spot on costa at $\frac{1}{3}$, and another somewhat beyond middle; a very small black spot in disc at $\frac{1}{3}$, a second directly beneath it on fold, a third in disc a little beyond first, and a fourth, larger and roundish, in disc beyond middle, in a line with first and third; a cloudy blackish outwards-curved transverse line from $\frac{3}{4}$ of costa to before anal angle, sharply indented inwards above middle, the indentation filled up with blackish: cilia pale whitish-ochreous, with a faint fuscous line before tips, basal half obscurely barred with fuscous. Hindwings fuscous-grey, considerably paler towards base; cilia ochreous-whitish, with two cloudy grey lines.

Distinguished amongst the species with forewings not dilated, by the large size, ochreous-brown suffusion, and blackish oblique mark at base of costa.

Mount Gambier, South Australia, in November; one fine specimen on a trunk of *Eucalyptus Gunnii*.

145. *Phloe. lithoglypta*, n. sp.

Media, alis ant. griseo albidis, lineis duabus anticis transversis flexuosis, fasciisque duabus posticis latis saturate ochreo-fuscis, punctis disci tribus maculaque parva fasciæ primæ media nigrescentibus; post. fuscis.

♀. 17 mm. Head whitish. Palpi dark fuscous, apex of second joint and a band above middle suffusedly whitish. Antennæ dark fuscous. Thorax dark ochreous-fuscous, lateral margins whitish. Abdomen whitish-ochreous. Anterior and middle legs dark fuscous, central ring of tibiæ and apex of all joints whitish-ochreous; posterior legs whitish-ochreous. Forewings elongate, moderate, costa moderately arched, apex rounded, hindmargin very obliquely rounded; grey-whitish, with a few scattered dark fuscous scales; extreme costal edge ochreous-tinged; a small dark fuscous spot on inner margin at base; an ill-defined irregular somewhat outwards-curved dark fuscous streak from base of costa

to inner margin at $\frac{1}{4}$; a similar partially interrupted streak from $\frac{1}{4}$ of costa to $\frac{1}{3}$ of inner margin, more reddish-ochreous in disc; a dark fuscous dot in disc before middle, a second below and obliquely beyond first, and a third directly beyond second; a moderately broad irregular-edged ochreous-brown fascia from costa beyond middle to inner margin before anal angle, and a broad triangular ochreous-brown patch on apical fourth of costa, extending to anal angle, and almost confluent with the transverse fascia and with hindmargin, both marked with short dark streaks on veins; a small round dark fuscous spot in middle of fascia; a hind marginal row of elongate cloudy ochreous-fuscous spots; cilia grey-whitish, with a broad cloudy ochreous-grey median line. Hindwings fuscous; cilia whitish-ochreous, with an indistinct fuscous line.

A distinct species, easily known by the grey-whitish ground-colour, and ochreous-brown anterior lines and posterior fasciæ.

Sydney, in November; one fine specimen on the trunk of *Eucalyptus* sp.

146. *Phloe. melanodelta*, n. sp.

Minor, alis ant. ochreo-fuscis, maculis costæ tribus saturatoribus, triangulo dorsi antico magno maculaque disci parva nigrescentibus; post. griseis, basim versus dilutioribus.

♂. 13-17 mm. Head pale whitish-ochreous, on crown mixed with dark fuscous. Palpi pale whitish-ochreous, mixed with dark fuscous, basal half and a subapical ring of second joint, and terminal joint except base and apex dark fuscous. Antennæ greyish-ochreous or fuscous, ciliations $\frac{2}{3}$. Thorax whitish-ochreous, mixed anteriorly with dark fuscous and reddish-ochreous. Abdomen ochreous-whitish. Anterior and middle legs dark fuscous, central ring of tibiæ and apex of all joints ochreous-whitish; posterior legs grey-whitish. Forewings moderate, costa moderately arched, apex rounded, hindmargin obliquely rounded; fuscous, irrorated with ochreous-whitish and dark fuscous; base indistinctly spotted with blackish-fuscous; a small suffused blackish-fuscous spot on costa at $\frac{2}{3}$, and a second beyond middle; a dark fuscous irregularly triangular sharply defined blotch on inner margin before middle, more blackish towards apex, reaching more than half

across wing ; a small round blackish-fuscous spot on disc beyond middle ; a dark fuscous inwardly oblique spot on costa before apex, preceded by a clearer whitish ochreous space, and emitting an indistinct interrupted curved line to anal angle ; a row of small suffused dark fuscous spots on hindmargin : cilia pale whitish-ochreous, irrorated with fuscous, basal half more ochreous and obscurely barred with dark fuscous. Hindwings fuscous-grey, paler towards base ; cilia grey-whitish, with an indistinct darker line.

The smallest species of the genus, and with the antennæ more shortly ciliated than any other ; differing from all by the sharply defined dark fuscous triangular dorsal spot.

Brisbane in September, and Sydney in December ; four specimens, mostly on the trunks of *Banksia*. I have found, but not succeeded in breeding, a larva feeding on the bark of *Banksia*, in a loose web among the crevices, which I expected to produce this species.

29. SPHYRELATA Meyr.

Head with loosely appressed scales, sidetufts moderately large, loosely appressed. Antennæ in ♂ stout, strongly serrate, minutely ciliated ($\frac{1}{4}$), basal joint moderate, without pecten, or with two or three fugitive scales. Palpi moderate, second joint not exceeding base of antennæ, dilated with dense appressed scales, thickest in middle, somewhat rough beneath, terminal joint shorter than second, moderate, recurved. Thorax with dense posterior crest. Forewings elongate, moderate, apex obtusely pointed, hindmargin obliquely rounded. Hindwings rather narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{4}$ to 1. Abdomen rather dilated, somewhat flattened. Middle tibiæ with median whorl of projecting hairs ; posterior tibiæ clothed with long fine hairs above. Forewings with vein 7 to apex, 2 from or slightly before angle of cell. Hindwings normal.

This genus closely approaches *Phlæopola*, from which it is distinguished mainly by the antennæ of the ♂, which are stouter, more strongly serrate, and very shortly ciliated. I regard it as an offshoot of *Phlæopola*. It is uncertain whether the first species

ought not to be referred to a distinct genus, since it seems to possess a more developed antennal pecten.

1a. Groundcolour white.....149. *melanoleuca*.

1b. „ „ whitish-ochreous.

2a. Hindwings whitish-ochreous or yellow

towards base148. *indecorella*.

2b. Hindwings wholly grey147. *ochrophæa*.

147. *Sphyr. (?) ochrophæa*, n. sp.

Minor, alis ant. ochreo-fuscis, disco leviter roseo-suffuso, basi costaque saturatoribus, punctis disci tribus saturate fuscis; post. dilute griseis.

♂ ♀. 15-18 mm. Head whitish-ochreous, crown ochreous. Palpi whitish-ochreous, terminal joint and base of second suffused with dark fuscous. Antennæ dark fuscous Thorax whitish-ochreous, anteriorly more ochreous with a few dark fuscous scales, anterior edge dark fuscous. Abdomen whitish-ochreous. Anterior and middle legs dark fuscous, central ring of middle tibiæ and apex of all joints whitish-ochreous; posterior legs whitish-ochreous, base of tarsal joints dark fuscous. Forewings elongate, moderate, costa gently arched, apex rounded, hindmargin very obliquely rounded; whitish-ochreous, suffused with light fuscous and towards disc with rosy-ochreous, and densely irrorated with dark fuscous; the dark fuscous suffusion is stronger towards base, along costa, and at apex; a dark fuscous dot in disc before middle, a second beyond middle, sometimes connected with first by a clear ochreous streak, and a third on fold slightly beyond first: cilia whitish-ochreous, mixed with dark fuscous, basal third barred with rosy-ochreous and dark fuscous. Hindwings light grey; cilia grey-whitish.

Somewhat peculiar in structure; there are distinct traces of an antennal pecten, which may perhaps be developed in fresh specimens; the hairs of the head (at least in ♂) are very dense and somewhat loosely dilated; the thoracic crest appears slightly developed. With further material it may be necessary to form a fresh genus for this species.

Brisbane and Sydney, from September to December ; five specimens.

148. *Sphyr. indecorella*, Walk.

(*Cryptolechia indecorella*, Walk., Brit. Mus. Cat., 764 ; *Oecophora amotella*, ib. 1034.)

Minor, alis ant. albido-ochreis, fascia latissima antica, altera post medium modica, maculaque costæ anteapicali lineam transversam emittente saturate fuscis, punctis disci quatuor nigris ; post. ♂ flavis, ♀ albido-ochreis, dimidio apicali fusco.

♂ ♀. 15-17 mm. Head and palpi whitish-ochreous, basal third of second joint and more or less of terminal joint suffused with dark fuscous. Antennæ light ochreous, base dark fuscous. Thorax whitish-ochreous, anterior half dark fuscous. Abdomen whitish-ochreous. Legs dark fuscous, central ring of middle tibiæ, hairs of posterior tibiæ, and apex of all joints whitish-ochreous. Forewings elongate, costa moderately arched, apex rounded, hindmargin very obliquely rounded ; pale whitish-ochreous ; a very broad oblique anterior dark fuscous fascia, inner edge very near base, outer edge from $\frac{2}{5}$ of costa to middle of inner margin, irregularly concave ; a moderate irregular-edged straight dark fuscous fascia from beyond middle of costa to anal angle ; a blackish dot in disc on margin of first fascia, another on inner margin of second, a third, minute, between these, and a fourth on fold on margin of first fascia ; a dark fuscous subtriangular blotch on costa before apex, emitting a curved dark fuscous line to anal angle ; some small cloudy confluent dark fuscous spots on hindmargin : cilia pale whitish-ochreous, towards base obscurely barred with dark fuscous, above costal blotch and on anal angle wholly dark fuscous. Hindwings in ♂ ochreous-yellow, in ♀ whitish-ochreous, apical half and a hindmarginal border suffused with fuscous-grey ; cilia fuscous-grey.

A very distinctly characterised species.

Sydney and Mittagong (2000 feet), New South Wales, in February and March ; three specimens.

149. *Sphyr. melanaleuca*, n. sp.

Minor, alis ant. niveis, macula basali magna, altera costæ media, tertia dorsi postica suffusa cum hac conjuncta, quarta apicis nigris; post. dilute griseis.

♂. 13-14 mm. Head, antennæ, and thorax blackish-fuscous, face whitish. Palpi white, basal half and subapical ring of second joint, and terminal joint more or less wholly blackish-fuscous. Abdomen whitish-grey. Legs dark fuscous, central ring of middle tibiæ and apex of all joints ochreous-white, hairs of posterior tibiæ grey-whitish. Forewings elongate, moderate, costa moderately arched, apex rounded, hindmargin very obliquely rounded; white, in disc partially yellowish-tinged; basal third wholly blackish-fuscous, outer edge slightly concave; a large irregular blackish-fuscous blotch on middle of costa, reaching half across wing; a dark fuscous suffused blotch on inner margin, extending almost from middle to anal angle, above partially confluent with costal blotch; a minute blackish dot in disc above fold before this; a subquadrate blackish-fuscous apical blotch, and hindmarginal edge blackish-fuscous: cilia ochreous-white, towards tips greyish tinged, towards base mixed with blackish-fuscous, above apical blotch wholly blackish-fuscous. Hindwings light grey, apex somewhat darker; cilia whitish-grey, with a suffused darker line.

Also a very distinct species.

Sydney, in October; four specimens at light.

30. *HIEROPOLA* Meyr.

Head smooth, sidetufts moderately large, loosely appressed, projecting somewhat between antennæ. Antennæ in ♂ slender, serrate, moderately ciliated (1), basal joint stout, without pecten. Palpi long, second joint very long, exceeding base of antennæ by half its length, obliquely ascending, thickened with appressed scales, somewhat roughened beneath towards apex, terminal joint less than half second, slender, erect. Thorax smooth. Forewings elongate, apex almost acute, hindmargin very obliquely round. Hindwings narrow than forewings, elongate ovate, hindmargin

rounded, cilia 1. Abdomen moderate. Posterior tibiae smoothly scaled, with a few hairs above. Forewings with vein 7 to apex, 2 from considerably before angle of cell. Hindwings normal.

This genus is at present rather isolated. In the structure of the palpi, and the yellow and rosy colouring it recalls *Hypercallia*, which differs in venation. Until some connecting forms are discovered, it cannot be determined whether the genus should be placed here, or, as is very possible, referred to the neighbourhood of *Hoplitica*.

150. *Hier. jucundella*, Walk.

(*Tisobarica jucundella*, Walk., Brit. Mus. Cat. 813.)

Minor, alis ant. dilute flavis, macula basali, fasciis tribus obliquis, quarta etiam marginis postici roseis, interdum griseo irroratis; post. ochreo-albidis.

♂ ♀. 13-14 mm. Head snow-white, side tufts yellowish-tinged, round antennae rosy. Palpi snow-white, a subapical ring of second joint yellowish-tinged, a broad median band of terminal joint dark fuscous. Antennae white, annulated with dark fuscous, basal joint yellowish-tinged. Thorax pale yellow, anterior margin white, with an irregular rosy spot on each side of back, and sometimes another behind. Abdomen ochreous-whitish. Legs white, anterior tibiae with two faint ochreous bands. Forewings elongate, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded; light yellow; markings light carmine-rosey, often irrorated partially or completely with bluish-grey, and more or less completely margined with dark fuscous; an irregular elongate spot from base very near inner-margin to $\frac{1}{4}$; a narrow irregular slightly outwards-curved fascia from costa near base to inner margin before middle, dilated abruptly on inner margin, connected in middle with extremity of basal spot; a similar broader fascia from before middle of costa to $\frac{3}{4}$ of inner margin, connected below middle by bar with dorsal extremity of first fascia, attenuated below this, posterior edge with two projecting teeth; a narrow irregular fascia from beyond middle of costa to anal angle, dilated towards costa, anterior edge with a sharp projecting tooth in middle; a hindmarginal fascia, rather broad on costa and

gradually attenuated to anal angle : cilia pale yellow, with a deep yellow median line, on anal angle and above hindmarginal fascia pale rosy-grey. Hindwings ochreous-whitish, more ochreous posteriorly ; cilia ochreous-whitish.

A beautiful insect, rather variable.

Brisbane, Newcastle, and Sydney, from September to November ; local, but rather common ; near Sydney frequenting *Eugenia*, at Brisbane *Eucalyptus*,

31. PILOPREPES Meyr.

Head loosely haired, sidetufts large, spreading. Antennæ in ♂ moderate, moderately and evenly ciliated ($1\frac{1}{2}$), basal joint stout, with strong pecten. Palpi moderate, second joint not reaching base of antennæ, densely scaled, somewhat roughened beneath towards apex, terminal joint rather shorter than second, moderate, curved. Thorax with a small posterior crest. Forewings elongate, moderate, apex rounded, hindmargin oblique ; surface with tufts of raised scales. Hindwings narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{3}{5}$. Abdomen moderate. Anterior tibiæ and basal joint of tarsi very strongly dilated with long dense hairs ; middle tibiæ densely clothed with hairs ; posterior tibiæ clothed with long fine hairs above. Forewings with vein 7 to apex, 2 from before angle of cell. Hindwings normal.

Closely allied to *Trachypepla*, from which it differs in the strongly dilated anterior tibiæ ; it is doubtless a late development of *Trachypepla*. The first species does not perhaps belong to this genus ; the ♂ is unknown, and the tips of the wings are imperfect ; so that the neuration cannot be absolutely determined, yet it seems to belong to this neighbourhood ; the dilated tarsi and tibiæ are, however, not conclusive, as they occur in other and remote genera.

1a. Hindwings dark grey..... 152. *cemulella*.

1b. „ whitish-yellow..... 151. *iriodes*.

151. *Pilopr. (?) iriodes*, n. sp.

Media, alis ant. niveis, dimidio antico roseo-suffuso, fasciis duabus anticis obliquis saturate flavis, postice rufo-marginatis, macula disci postica glauca flavo-cincta, margine postico flavo ; post. dilute albido-flavis.

♀. 18 mm. Head glossy ochreous-whitish, sidetufts deep golden-ochreous. Palpi white, externally ochreous-tinged. Antennæ whitish-ochreous. Thorax pearly-white, mixed with ochreous and light rosy (partly defaced). Abdomen and legs ochreous-whitish; anterior tibiæ deep ochreous above. Forewings moderate, costa moderately arched, hindmargin obliquely rounded; pearly white; anterior half suffused with light carmine rosy; an irregular deep orange-yellow fascia from base of costa to inner margin before middle, and a second somewhat broader from before middle of costa to beyond middle of inner margin, both attenuated and partially obsolete on inner margin, and posteriorly margined with reddish-fuscons, connected on fold by a spot of orange-yellow and reddish-fuscons partially raised scales; a very pale greyish-blue oval spot towards hindmargin in middle, surrounded by a broad ring of irregularly scattered orange-yellow scales, which touches central fascia and apex; hindmargin narrowly orange-yellow: cilia white, slightly mixed with yellow, with an orange-yellow line round apex. Hindwings pale whitish-yellow, base paler; cilia pale whitish-yellow.

A singular and very delicately coloured insect.

Sydney, in November; one specimen, not in very good condition.

152. *Pilopr. emulella*, Walk.

(*Oecophora emulella*, Walk., Brit. Mus. Cat., 697.)

Minor, alis ant. saturate flavo-ochraceis, fascia antica lata, macula disci postica transversa magna, altera anguli analis parva, strigulaque ante apicem obliqua niveis; post. saturate griseis.

♂ ♀. 15-16½ mm. Face snow-white, sidetufts ochreous-orange mixed with white. Palpi white, partially suffused with ochreous-orange, and with scattered dark fuscous scales. Antennæ whitish, obscurely ringed with fuscous. Thorax white, posteriorly irregularly spotted with reddish-ochreous, anterior margin broadly reddish-ochreous. Abdomen pale ochreous, mixed with grey. Anterior legs brownish-ochreous suffused with dark fuscous. second tarsal joint and apical half of first snow-white; middle tibiæ ochreous, with two oblique dark fuscous bands, apex white, tarsi

dark fuscous, with white rings at apex of joints; posterior legs whitish-ochreous; all femora pearly white beneath. Forewings moderate, costa moderately arched, apex rounded, hindmargin obliquely rounded; deep ochreous-orange, more brownish-tinged towards middle, paler posteriorly; a raised tuft very near base; a broad snow-white fascia from $\frac{1}{4}$ of costa to $\frac{1}{3}$ of inner margin, rather narrower on costa, its edges irregularly waved; its outer edge with three raised tufts, followed by suffused blackish spots; a small blackish spot on fold beyond middle; posterior half of costa with ill-defined oblique whitish strigulae; a moderately large irregularly ovate transverse snow-white spot in disc beyond middle, extending from near costa $\frac{2}{3}$ across wing; beyond middle of posterior margin of this a raised tuft mixed with black; a smaller sub triangular snow-white spot on anal angle; an irregular snow-white spot running from costa before apex to middle of hindmargin; a slender irregular white line along upper half of hindmargin: cilia whitish-orange, with a darker median line. Hindwings dark fuscous-grey, base paler; cilia pale ochreous, towards anal angle greyish-tinged.

Very conspicuous and easily recognised.

Brisbane and Duaringa, Queensland, in September; six specimens, from *Eucalyptus*.

32. TRACHYPEPLA Meyr.

Head loosely haired, sidetufts moderate or rather large, loosely spreading. Antennae in ♂ moderate, somewhat serrate, moderately and evenly ciliated ($1-1\frac{1}{2}$), rarely with fascicles of cilia, basal joint moderate, with strong pecten. Palpi moderate or rather short, second joint not exceeding base of antennae, densely scaled, somewhat rough beneath, terminal joint shorter than second, moderate, recurved. Thorax smooth or with a distinct crest. Forewings elongate, apex round-pointed, hindmargin very obliquely rounded; surface with tufts of raised scales. Hindwings narrower than forewings, elongate-ovate, hindmargin slightly rounded, cilia $\frac{3}{4}$ to 1. Abdomen moderate, strongly margined. Posterior tibiae clothed with fine moderate hairs above. Forewings with vein 7 to apex, 2 from angle of cell. Hindwings normal.

Allied to *Eulechria*, from which it differs by the tufts of scales on the forewings. The genus is characteristic of New Zealand, and considerably developed there, but there is one Australian species. The Australian genus *Piloprepes* is certainly closely allied to it, and so (less intimately) is the European *Anchinia*. I believe that we have here one of the older types of the family, now approaching extinction. Its true affinity cannot be certainly demonstrated at present, but I am disposed to think that it may be regarded as originating from a genus intermediate between *Oecophora* and *Phlaeopola*, and as collateral with but older than *Phlaeopola*. There can therefore be no direct connection between *Trachypepla* and *Eulechria*.

- 1a. Head dark fuscous.
- 2a. Forewings with clear white markings.
- 3a. Basal half white153. *leucoplanetis*.
- 3b. „ third „154. *euryleucota*.
- 3c. „ fifth „155. *conspicuellæ*.
- 2b. „ without white markings161. *anastrella*.
- 1b. „ light greyish or ochreous.
- 2a. Hindwings dark fuscous..162. *lichenodes*.
- 2b. „ grey.
- 3a. Anterior line represented by two tufts.....163. *melanoptila*.
- 3b. „ „ well-defined.
- 4a. Anterior line very obtusely angulated157. *nyctopis*.
- 4b. „ „ rectangularly „156. *spartodeta*.
- 4c. „ „ acutely „159. *protochlora*.
- 2c. „ grey-whitish160. *aspidephora*.
- 1c. „ white.....158. *galaxias*.

153. *Trach. leucoplanetis*, Meyr.

Parva, alis ant. dimidio anteriori niveo, posteriori fusco, costæ basi nigricante, macula costæ anteapicali cum linea transversa conjuncta nivea; post. griseis.

Hamilton and the Otira River, New Zealand, in January; two specimens.

154. *Trach. euryleucota*, Meyr.

Minor, alis ant. saturate fuscis, macula magna basali alteraque parva costæ anteapicali lineam transversam emittente canis, costæ basi nigra; post. saturate griseis.

New Zealand, from Auckland to Dunedin, in January; tolerably common.

155. *Trach. conspicuella*, Walk.

(*Gelechia conspicuella*, Walk., Brit. Mus. Cat. 651.)

Minor, alis ant. fuscis, macula ad basim transversa angustiori, alteraque parva costæ anteapicali nebulosa lineam transversam emittente canis; post. griseis.

Wellington and Christchurch, New Zealand, in December and January; common.

156. *Trach. spartodeta*, Meyr.

Minor, alis ant. dilute griseo-ochreis, linea antica transversa, rectangulata, altera postica sinuata, maculaque costæ media elongata saturate fuscis, macula disci parva ferruginea; post. dilute griseis.

Wellington, New Zealand, in January; one specimen.

157. *Trach. nyctopis*, Meyr.

Minor, alis ant. griseis, striga antica transversa leviter flexuosa nigra, interdum fascia lata pallidiore, macula costæ media elongata lineaque postica transversa sinuata saturate fuscis; post. griseis.

Christchurch and Dunedin, New Zealand, in January and February; common.

158. *Trach. galaxias*, Meyr.

Minor, alis ant. canis, griseo-sparsis, postice interdum griseo-suffusis, fascia ad basim lata postice fere retangulata nigroque marginata, costæ triangulo medio, lineaque postica transversa sinuata saturate griseis; post. griseis.

From Hamilton to the Bealey River, New Zealand, in January; three specimens.

159. *Trach. protochlora*, Meyr.

Minor, alis ant. albidis, virescenti-suffusis, fascia ad basim, costæ triangulo medio, maculaque apicis griseis, linea antica transversa acute angulata nigra; post. griseis.

Palmerston and the Otira River, New Zealand, from January to March; three specimens.

160. *Trach. aspidephora*, Meyr.

Minor, alis ant. albidis, leviter ochreo-suffusis, macula costæ postica magna subtriangulari alteraque apicis parva saturate griseis, nigro-mixtis; post. griseo-albidis.

Christchurch and Dunedin, New Zealand, in December and January; tolerably common.

161. *Trach. anastrella*, Meyr.

Minor, alis ant. fuscis, saturatiori-suffusis, linea antica transversa, fere rectangulata, nigra, altera postica sinuata costæque triangulo saturate fuscis; post. saturate fuscis.

From Christchurch to Invercargill, New Zealand, in December, January and March; tolerably common.

162. *Trach. lichenodes*, Meyr.

Minor, alis ant. saturate purpureo-fuscis, partim flavido-sparsis, maculis disci tribus parvis nigris, macula dorsi ad basim albida, altera dorsi postica fasciaque marginis postici flavidis; post. saturate fuscis.

On the Bealey River, New Zealand, in January; one specimen.

163. *Trach. melanoptila*, n. sp.

Minor, alis ant. griseis, punctis disci duobus anticis, linea postica transversa recta, altera marginem posticum versus curva nigris; post. griseis.

♂ ♀. 14-18. mm. Head and thorax light fuscous-grey, mixed with grey-whitish. Palpi grey, second joint sometimes more whitish, with a dark fuscous subapical ring. Antennæ fuscous. Abdomen light ochreous-grey. Anterior and middle legs dark fuscous, apex of joints very obscurely whitish; posterior legs grey-writish. Forewings elongate, rather narrow, costa moderately

arched, apex round-pointed, hindmargin almost straight, extremely oblique; light fuscous-grey, with scattered grey-whitish scales, and sometimes a few black scales; a raised blackish tuft in disc before middle, and a second obliquely beyond it on fold, sometimes connected with margins by a few raised black scales; an irregular line of raised black scales from $\frac{3}{5}$ of costa to anal angle, more strongly marked in disc; a few black scales forming a curved transverse line towards hindmargin: cilia ochreous-whitish, suffused with light fuscous-grey. Hindwings fuscous-grey; cilia ochreous-whitish, suffused with light fuscous-grey.

Not closely approaching any other, but with marked general affinity, and quite typical.

Sydney, in November and December; five specimens from *Kunzea capitata*.

32*. MESOLECTA n. g.

Head loosely haired, sidetufts moderate, spreading. Antennæ in ♂ moderate, moderately and evenly ciliated (1), basal joint moderate, with strong pecten. Palpi moderate, second joint reaching base of antennæ, with appressed scales, rather loose beneath, terminal joint shorter than second, moderate, curved. Thorax with an erect crest. Forewings elongate, apex rounded, hindmargin obliquely rounded. Hindwings slightly narrower than forewings, elongate-ovate, hindmargin rounded, cilia $\frac{4}{5}$. Abdomen moderate. Posterior tibiæ clothed with long hairs above. Forewings with vein 7 to hindmargin, 2 from somewhat before angle of cell. Hindwings normal.

The single species of this genus has only recently come into my hands; the genus is therefore not included in the analytical table, but will fall under the same head with *Epipyrga*, from which it may be immediately distinguished by the antennal pecten.. It is very closely allied to *Nephogenes*, from which it differs only by the crested thorax.

164. *Mes. psacasta*, n. sp.

Media, alis ant. griseis, albido-sparsis, macula costæ ad basim parva, altera antica, triangulo postico depresso, maculaque anguli analis parva saturate griseis, punctis disci quinque nigris; post. griseis.

♂ ♀. 17.20 mm. Head ochreous-whitish, crown slightly greyish-tinged. Palpi ochreous-white, second joint externally fuscous-grey except at apex. Antennæ grey. Thorax light grey, with a small blackish spot on shoulder. Abdomen ochreous-whitish. Anterior legs dark fuscous; middle legs grey; posterior legs ochreous whitish. Forewings elongate, moderate, costa moderately arched, apex rounded, hindmargin obliquely rounded; light grey, densely irrorated with whitish; a small transverse blackish-grey spot on base of costa, reaching fold; a small blackish-grey spot on costa at $\frac{1}{4}$; a very flattened triangular blackish-grey patch on costa from before middle to $\frac{3}{4}$, reaching $\frac{1}{4}$ across wing; a blackish dot in disc at $\frac{1}{3}$, a second directly beneath it on fold, a third above middle of disc, a fourth and fifth transversely placed and confluent in disc beyond middle, and a sixth rather below and before these: between the first two and towards inner margin are some scattered blackish scales; a small blackish-grey spot above anal angle; a small blackish-grey spot on costa before apex, emitting an outwards-curved interrupted line to anal angle: cilia whitish, posteriorly slightly suffused with greyish, with a blackish-grey median line. Hindwings grey; cilia grey-whitish, with a grey line.

Has a strong general resemblance to the species of *Nephogenes*.

Port Lincoln, South Australia, in November; tolerably common, but at that season most of the specimens worn; probably October is its usual month.

33. NEPHOGENES Meyr.

Head loosely haired, sidetufts moderate, spreading, loosely projecting between antennæ. Antennæ in ♂ moderate, moderately and evenly ciliated ($1-1\frac{1}{2}$), basal joint with strong pecten. Palpi moderate, second joint not reaching base of antennæ, densely scaled, rather loosely beneath, terminal joint shorter than second, curved. Thorax smooth. Forewings elongate, moderate or rather narrow, apex more or less rounded, hindmargin oblique. Hindwings hardly narrower than forewings, elongate-ovate, hindmargin

rounded, cilia $\frac{1}{2}$ to $\frac{4}{5}$. Abdomen moderate. Posterior tibiae clothed with long fine hairs. Forewings with vein 7 to hind-margin, 2 from angle of cell. Hindwings normal.

Closely allied to *Philobota*, from which it differs by the second joint of palpi not reaching base of antennæ. From *Eulechria*, with some species of which there is a strong superficial resemblance, it is separated by the hindmarginal termination of vein 7 of the forewings. It approaches *Coesyra* very closely in structure; the loose hairs of the head, and anteriorly projecting sidetufts seem to form the best distinction, but it must be admitted that the point is an unsatisfactory one. I consider the genus to be a development from *Eulechria* (the termination of vein 7 is only just below the apex), and to be itself the origin of the two large and collateral genera *Philobota* and *Coesyra*; it is therefore an important link. The species are very dull-coloured and extremely similar in general appearance, but usually very constant, and common where they occur.

- 1a. Hindwings whitish-ochreous.
- 2a. Apex of hindwings dark fuscous.....170. *protorthra*.
- 2b. „ „ „ hardly darker171. *philopsamma*.
- 1b. „ „ dark fuscous; species small.
- 2a. Forewings with six discal dots.....172. *æthalea*.
- 2b. „ „ three „173. *microschema*.
- 1c. „ „ grey.
- 2a. Forewings very elongate and narrow.....174. *apora*.
- 2b. „ „ not narrow.
- 3a. With a dark costal triangle.
- 4a. Edge of basal patch or fascia outwardly oblique.
- 5a. With a basal patch168. *orescoa*.
- 5b. „ „ fascia near base169. *fædatella*.
- 4b. „ „ „ „ inwardly oblique.
- 5a. Head clear whitish-ochreous.....167. *mathematica*.
- 5b. „ „ light greyish..... ..166. *ennephela*.
- 3b. Without costal triangle.....165. *egélida*.

165. *Neph. egelida*, n. sp.

Media, alis ant. griseis, leviter nigro-sparsis, punctis disci quinque lineaque postica transverse angulata perobscuris nigris ; post. albido-griseis.

♂. 18-20 mm. Head and thorax light grey. Palpi dark fuscous, base of terminal joint, and base and apex of second joint whitish. Antennæ grey-whitish. Abdomen ochreous-whitish. Anterior and middle legs dark-fuscous, apex of joints whitish ; posterior legs ochreous-whitish. Forewings elongate, costa moderately arched, apex round-pointed, hindmargin very obliquely rounded ; light uniform grey, with a few scattered fine black scales ; a very obscure blackish dot in disc before middle, a second on fold somewhat beyond first, a third above middle, a fourth and fifth transversely placed beyond middle ; a faint interrupted blackish-grey transverse line from costa at $\frac{2}{3}$ obliquely outwards to before apex, thence sharply angulated and continued to anal angle : cilia pale whitish-grey. Hindwings whitish-grey ; cilia whitish.

A distinct species, easily known by its light uniform grey colouring, the obsolescence of the markings, and the peculiar form of the posterior line.

Sydney, in August ; one of the earliest spring insects ; three specimens.

166. *Neph. ennephela*, n. sp.

Major, alis ant. griseis, albido-mixtis, nigro-sparsis, mucula ad basim superius dilatata, costæque triangulo medio fuscis, punctis disci sex lineaque postica transversa flexuosa nigrescentibus ; post. albido-griseis ; capite griseo.

♂. 21-27 mm. Head whitish mixed with fuscous. Palpi whitish mixed with dark fuscous, second joint externally dark fuscous except at apex. Antennæ light grey. Thorax fuscous-grey mixed with whitish, with a small suffused dark fuscous spot on shoulder. Abdomen grey-whitish, anal tuft ochreous-whitish. Anterior and middle legs dark fuscous, apex of joints whitish ; posterior legs dull-ochreous whitish. Forewings elongate, posteriorly somewhat dilated, costa moderately arched, apex rounded,

hindmargin very obliquely rounded ; light fuscous-grey, irregularly mixed with whitish, and with scattered blackish scales ; a fuscous basal patch, its outer edge inwardly oblique, from $\frac{1}{4}$ of costa to $\frac{1}{5}$ of inner margin ; a triangular fuscous patch on costa somewhat before middle, reaching $\frac{1}{3}$ across wing ; a blackish dot in disc at $\frac{1}{3}$, a second on fold slightly beyond first, a third on apex of costal triangle, and three others transversely placed and generally united into a crescentic mark in disc beyond middle ; an irregular interrupted blackish-grey transverse line from $\frac{3}{4}$ of costa to before anal angle, indented inwards beneath costa, angulated in disc, and somewhat bent above anal angle ; a row of dark fuscous dots on hindmargin : cilia whitish, with two interrupted fuscous-grey lines. Hindwings pale grey or whitish-grey, rather darker posteriorly ; cilia whitish-grey, with a darker line.

The largest species of the genus, and the only one in which the forewings are at all dilated ; differs from all but the next species in the form of the basal patch, which is broadest above ; from *N. mathematica* it is separated by the much cloudier appearance and lighter markings, and by the greyish head.

Blackheath (3,500 feet), New South Wales, in October ; common.

167. *Neph. mathematica*, n. sp.

Media, alis ant. griseis, cano-mixtis, nigro-sparsis, macula ad basim superius dilatata, costæ triangulo medio, punctis disci quinque lineaque postica transversa flexuosa nigris ; post. albidogriseis ; capite albidoochreo.

♂. 16-20 mm, Head clear whitish-ochreous. Palpi white, slightly mixed with fuscous, second joint externally dark fuscous except at apex. Antennæ pale grey. Thorax white, somewhat mixed with grey, with a suffused dark fuscous spot on shoulder. Abdomen whitish-ochreous. Anterior and middle legs dark fuscous, apex of joints obscurely whitish ; posterior legs ochreous-whitish. Forewings elongate, moderate, costa moderately arched, apex rounded, hindmargin very obliquely rounded ; light fuscous-grey, mixed with whitish, and partially suffused with white round

dark markings, irregularly irrorated with blackish, especially towards disc; a narrow inwardly oblique slightly outwards-curved blackish fascia from costa at $\frac{1}{4}$ to inner margin at $\frac{1}{5}$, before which the basal space is suffused with dark grey; a blackish triangular spot on costa somewhat before middle, sharply defined anteriorly, nearly reaching middle of wing; a black dot in disc at $\frac{1}{3}$, a second obliquely rather beyond it on fold, and three others transversely placed and usually united into a crescentic mark in disc beyond middle; a somewhat interrupted blackish-grey transverse line from costa at $\frac{3}{4}$ to before anal angle, sinuate beneath costa, angulated outwards in disc, and again sinuate above inner margin; a row of dark fuscous dots in hindmargin: cilia whitish, with two grey interrupted lines. Hindwings grey-whitish, posterior half suffused with grey; cilia whitish, greyer round apex, with a suffused grey line.

Very closely allied to the preceding, but smaller, with the head clear whitish-ochreous, the markings of the forewings blackish and sharply defined by the adjacent white suffusion; the forewings do not appear at all dilated.

Sydney, in September; found rather commonly on a fence during a high wind.

168. *Neph. orescoa*, n. sp.

Media, alis ant. griseis, albido-irroratis, macula ad basim obliqua, triangulo costae medio, punctis disci quinque, lineaque postica flexuosa nigris; post. dilute griseis, apice saturatiori.

♂ ♀. $16\frac{1}{2}$ -19 mm. Head whitish mixed with grey. Palpi whitish, terminal joint towards apex, and second joint externally except at apex dark fuscous. Antennae grey-whitish. Thorax whitish, mixed with grey, with a dark fuscous spot on shoulder. Abdomen ochreous-whitish. Anterior and middle legs dark fuscous, central ring of middle tibiae and apex of joints obscurely ochreous-whitish; posterior legs ochreous-whitish. Forewings elongate, costa gently arched, apex rounded, hindmargin very obliquely rounded; fuscous-grey, very finely irrorated with whitish; a narrow blackish basal patch; its outer edge outwardly oblique, from $\frac{1}{7}$ of costa to $\frac{1}{5}$ of inner margin; a suffused triangular

blackish patch on middle of costa, reaching $\frac{1}{3}$ across wing; a black dot in disc at $\frac{1}{3}$, a second slightly beyond it on fold, a third and fourth transversely placed and sometimes confluent in disc beyond middle, and a fifth before and slightly below fourth; a small blackish spot on costa at $\frac{3}{4}$, emitting an outwards-curved obscure dark grey line to before anal angle; a row of dark fuscous dots on hindmargin; cilia grey, extreme tips white. Hindwings whitish-grey, apex rather dark grey; cilia whitish-grey, darker round apex.

Easily distinguished from the two preceding species by the different form of the basal patch; it is also a smaller and neater insect; smaller than *N. foedatella*, with the wings more elongate, the basal patch entire, and without the additional anterior discal dot.

Sydney, Mount Keira near Wollongong, and Blackheath (3,500 feet), New South Wales, in September and October; common.

The ♀ in this and other species of the genus is commonly much more obscure than the ♂, and usually best distinguished by the form of wing.

169. *Neph. foedatella*, Walk.

(*Cryptolechia foedatella*, Walk., Brit. Mus. Cat., 763.)

Media, alis ant. griseis, ♂ cano-suffusis, fascia prope basim angusta obliqua, costæ triangulo medio lineaque postica transversa flexuosa saturate fuscis, punctis disci septem nigris; post. griseis, basim versus dilutioribus.

♂ ♀. 20-24 mm. Head ochreous-whitish or whitish-grey. Palpi white, more or less suffused with dark fuscous, except base and apex of second joint. Antennæ whitish, annulated with fuscous. Thorax white mixed with grey, anterior margin fuscous-grey. Abdomen whitish-ochreous, sometimes greyish-tinged. Anterior and middle legs dark fuscous, apex of joints whitish; posterior legs ochreous-whitish. Forewings elongate, moderate, costæ moderately arched, apex rounded, hindmargin nearly straight, oblique; light fuscous-grey, in ♂ more or less strongly suffused with white; a dark fuscous oblique slightly outwards-curved

narrow fascia near base, from $\frac{1}{8}$ of costa to $\frac{1}{5}$ of inner margin, sometimes obsolete beneath fold; a dark fuscous triangular spot on costa towards middle, anteriorly suffused, reaching $\frac{1}{3}$ across wing; a blackish (sometimes double) dot in disc before middle, a second rather beyond it on fold, a third, elongate, above and beyond second, a fourth on apex of costal triangle, and three others transversely placed in disc beyond middle, and generally united into a crescentic mark; a small cloudy dark fuscous spot on costa at $\frac{3}{4}$, emitting an outwards-curved fuscous-grey line to before anal angle, its extremities often joined by an inwards-curved fuscous shade; sometimes a row of fuscous hindmarginal dots: cilia ochreous-whitish, with an interrupted fuscous-grey line. Hindwings fuscous-grey, towards base rather paler and slightly ochreous-tinged; cilia ochreous-whitish, with a faint grey basal line.

Rather variable, but specially characterised by the outwardly oblique dark fascia near base, and the additional discal dot beyond and between the first two. In form of wing the species recalls *Eulechria adoxella*.

Brisbane, Rosewood, and Toowoomba, Queensland, in September; round Sydney in November and January; tolerably common. The northern specimens are the most distinctly marked.

170. *Neph. protorthra*, n. sp.

Media, alis ant. saturate fuscis, albido-irroratis, macula ad basim obliqua, costæ triangulo medio, lineaque postica flexuosa saturatioribus, punctis disci sex nigris; post. albido-ochreis, apice saturate fusco-suffuso.

♂ ♀. 16-21 mm. Head, palpi, and thorax dark fuscous, somewhat mixed with whitish-ochreous. Antennæ dark fuscous. Abdomen whitish-ochreous suffused with dark fuscous. Legs dark fuscous, central ring of middle tibiæ and apex of all joints ochreous-whitish, posterior tibiæ whitish-ochreous. Forewings elongate, moderate, costa gently arched, apex rounded, hindmargin nearly straight, oblique; dark fuscous, irrorated with white or ochreous-whitish, except towards hindmargin; a blackish-fuscous basal patch, its outer edge oblique, from $\frac{1}{7}$ of costa to $\frac{1}{4}$ of inner margin;

a triangular blackish fuscous patch towards middle of costa, anteriorly suffused, reaching $\frac{1}{3}$ across wing; a black dot in disc before middle, a second slightly beyond it on fold, a third on apex of costal triangle, and three others transversely placed and generally united into a crescentic mark in disc beyond middle; an obscure darker transverse outwards-curved line, from a small spot on costa at $\frac{3}{4}$ to before anal angle: cilia whitish-ochreous suffused with grey, with a dark grey interrupted line. Hindwings dull whitish-ochreous, slightly-fuscous tinged, apex and hindmarginal edge suffused with dark fuscous; cilia fuscous grey, tips paler.

Conspicuously distinguished by the peculiar hindwings, which are alike in both sexes; these pale hindwings are specially characteristic of the Tasmanian mountain fauna.

Mount Wellington, Tasmania, from 1000 to 1500 feet; common, early in December.

171. *Neph. philopsamma*, n. sp.

Minor, alis ant. dilute fuscis, cano-mixtis, basi, costæ dimidio antico, macula postica lineaque transversa flexuosa saturatioribus, punctis disci tribus nigris; post. albido-ochreis.

♂ ♀. 15 mm. Head whitish-yellow. Palpi dark fuscous, terminal joint and apex of second whitish. Antennæ dark fuscous. Thorax whitish, anteriorly mixed with dark fuscous. Abdomen whitish-ochreous. Legs dark fuscous, central ring of middle tibiæ, apex of all joints, and hairs of posterior tibiæ whitish-ochreous. Forewings elongate, costa moderately arched, apex rounded, hindmargin obliquely rounded; ochreous-grey, mixed with white; base, a costal streak from base to before middle, a spot on costa beyond middle, and an inwardly oblique spot at $\frac{4}{5}$ suffusedly darker; a black dot on fold at $\frac{1}{3}$, and two others transversely placed in disc beyond middle; an outwardly-curved line of blackish scales from posterior costal spot to before anal angle: cilia white, beneath anal angle ochreous-tinged, with an interrupted fuscous-line. Hindwings whitish-ochreous, slightly fuscous-tinged; cilia whitish-ochreous, with a fuscous line near base

An inconspicuous but easily recognised species.

Wallaroo, South Australia, on coast sandhills at the beginning of November ; two specimens.

172. *Neph. æthalea*, n. sp.

Minor, alis ant. saturate fuscis, disco cano-suffuso, punctis disci sex lineaque postica transversa flexuosa nigrescentibus ; post. saturate fuscis.

♂. $12\frac{1}{2}$ -15 mm. Head, palpi, antennæ, thorax, abdomen, and legs dark fuscous, slightly mixed with whitish ; hairs of posterior tibiæ whitish-ochreous. Forewings elongate, costa slightly arched, apex rounded, hindmargin nearly straight, oblique ; dark fuscous ; disc more or less strongly suffused with white, obliquely extended to costa at $\frac{2}{3}$; sometimes some white scales towards hindmargin ; a black dot in disc before middle, a second hardly beyond it on fold, a third above middle, a fourth above and beyond second, and two or three others transversely placed and confluent beyond middle ; an indistinct darker outwards-curved line from $\frac{3}{4}$ of costa to anal angle ; cilia grey, with an interrupted dark fuscous line. Hindwings dark fuscous ; cilia fuscous-grey.

Differing from all but *N. microschemum* by the dark fuscous hindwings and smaller size ; from *N. microschemum* it is easily distinguished by the discal dots, which are arranged as in *N. fœdatella*. It has considerable superficial resemblance with the larger *Eulechria tanyscia*.

Mount Lofty range and Mount Gambier, South Australia, in October and November ; four specimens.

173. *Neph. microschemum*, n. sp.

Minor, alis ant. saturate fuscis, partim albedo-sparsis, punctis disci tribus lineaque postica transversa flexuosa nigrescentibus ; post. saturatius fuscis.

♂. $11\frac{1}{2}$ -14 mm. Head, palpi, antennæ, thorax, abdomen, and legs dark fuscous ; palpi internally ochreous-whitish. Forewings elongate, costa gently arched, apex round-pointed, hindmargin very oblique, hardly rounded ; dull fuscous, irrorated with dark

fuscous and ochreous-whitish ; base and costa suffusedly darker ; an obscure blackish dot in disc before middle, a second directly beneath it on fold, and a third in disc beyond middle ; an obscure darker spot above anal angle ; an obscurely indicated darker transverse outwards-curved line very near hindmargin indented, inwards beneath costa : cilia grey, with a darker basal line, tips whitish. Hindwings rather dark fuscous ; cilia grey, with a darker line.

Very obscure-looking, but perfectly distinct ; the smallest of the genus.

Mount Wellington, Tasmania, 1000-1200 feet, at the beginning of December ; rather common.

174. *Neph. apora*, n. sp.

Media, alis ant. angustis, griseis, albido-mixtis, costæ triangulo depresso medio saturatiori, puncto ad basim, aliis disci septem, lineaque postica transversa flexuosa nigrescentibus ; post. griseis.

♂. 17-22 mm. Head, palpi, and thorax white, irregularly mixed with fuscous. Antennæ grey-whitish. Abdomen elongate, ochreous-whitish. Anterior and middle legs dark fuscous mixed with whitish ; posterior legs whitish. Forewings elongate, narrow, costa slightly arched, apex round-pointed, hindmargin extremely obliquely rounded ; white, fine and irregularly irrorated with fuscous ; a small blackish spot very near base beneath costa ; a very indistinct grey flattened-triangular blotch on costa towards middle, a black dot in disc at $\frac{1}{3}$, a second, rather elongate, on fold beyond first, a third above middle, a fourth and fifth transversely placed beyond middle, a sixth below and before fifth, and a seventh before sixth ; a strongly outwards-curved blackish-grey line from costa at $\frac{4}{5}$ to before anal angle, sharply indented beneath costa ; cilia whitish, with a blackish-grey median line, and a faint grey line before tips. Hindwings grey, darker posteriorly ; cilia grey-whitish, with a grey line.

Distinguished from all by the peculiarly elongate and narrow forewings, with extremely oblique hindmargin.

Coomooboolaroo, near Duaringa, Queensland ; several specimens sent by Mr. G. Barnard.

34. ANTIDICA, Meyr.

Head loosely haired, sidetufts small, spreading. Antennæ in ♂ rather thick, somewhat serrate, biciliated with rather long tufts of hairs (2); basal joint stout, with moderate pecten. Palpi rather long, second joint exceeding base of antennæ, densely scaled, somewhat loosely beneath, terminal joint shorter than second, moderate, recurved. Thorax smooth. Forewings elongate, apex obtusely pointed, hindmargin very oblique. Hindwings almost as broad as forewings, elongate-ovate, hindmargin slightly rounded, cilia $\frac{2}{3}$. Abdomen elongate, broad, somewhat flattened. Posterior tibiæ clothed with long fine hairs. Forewings with vein 7 to hindmargin, 2 from angle of cell. Hindwings normal.

Closely allied to *Philobota*, of which it is perhaps an earlier form, differing in the increased development of the antennal ciliations, and the peculiar stout and elongate abdomen.

1a. Forewings ochreous white.....175. *erimorpha*.

1b. „ ochreous-grey.....176. *barysoma*.

175. *Ant. erimorpha*, n. sp.

Média, alis ant. ochreo-albis, vitta angusta supra medium, interdum etiam dorso fuscis; post. saturate fuscis.

♂. 17-21 mm. Head and thorax white, suffused with fuscous except on sides. Palpi white, more or less wholly suffused with dark fuscous. Antennæ whitish. Abdomen ochreous-whitish. Legs dark fuscous, hairs of posterior tibiæ ochreous-whitish. Forewings elongate, rather narrow, costa gently arched, apex pointed, hindmargin extremely obliquely rounded; ochreous-white; costal edge slenderly blackish towards base; a straight narrow longitudinal fuscous streak from base above middle to apex of costa, posteriorly somewhat paler and tending to be trifurcate at extremity; inner margin sometimes narrowly fuscous: cilia ochreous-white. Hindwings dark-fuscous; cilia whitish, towards base suffused with fuscous-grey.

In markings recalling typical species of *Philobota*.

Round Melbourne and at Mount Macedon, Victoria, in November; rather common.

176. *Ant. barysoma*, n. sp.

Minor, alis ant. griseis, ochreo albidoque mixtis, punctis disci plerisque circulatim dispositis sæpius obsoletis nigris; post. saturate fuscis.

♂. 15-16 mm. Head, palpi, antennæ, thorax, abdomen and legs greyish-fuscous; hairs of posterior tibiæ paler. Forewings elongate, posteriorly somewhat contracted, costa gently arched, apex round-pointed, hindmargin very obliquely rounded; fuscous-grey, mixed with ochreous and grey-whitish scales; six or seven small black dots arranged in an irregular oval in disc, often partially obsolete: cilia whitish-ochreous. Hindwings dark fuscous; cilia whitish-ochreous, with a dark fuscous line near base.

The unusual form of the forewings gives this species a rather singular facies.

Common at Deloraine, Tasmania, in November, amongst rushes (*Juncus*) in swampy places, flying rather actively and apparently naturally by day; also taken by Mr. G. H. Raynor, near Melbourne.

SOME REMARKS ON THE ACTION OF TANNIN ON INFUSORIA.

BY HARRY GILLIATT, ESQ.

In the April number of the "Royal Microscopical Society's Journal," appeared a paper by Mr. Waddington* on the action of Tannin on the Cilia of the Infusoria, which must have aroused considerable interest in the minds of those Microscopists who pay special attention to this group.

Mr. Waddington says:—

"In trying the effect of various Chemicals on Infusoria—principally *Paramæcium Aurelia*, I was led to use a solution of tannin, or tannic acid; and I was surprised to find that the immediate action of this chemical was to render the cilia visible without any manipulation of the light.

* "The action of Tannin on the Cilia of Infusoria, with remarks on the use of solution of Sulphurous Oxide in Alcohol"; by Henry J. Waddington. read 14th March 1883. "Journal Royal Microscopical Society," April, 1883.